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• (1830)

[English]

The Chair (Mr. Francis Scarpaleggia (Lac-Saint-Louis, Lib.)): I call this meeting to order.

[Translation]

I'd like to welcome Mr. McLean, who is substituting for Mr. Mazier, and to Mrs. Vignola, who is replacing Ms. Pauzé.

Welcome to the committee.

Elizabeth May is also with us this evening from the west coast, if I'm not mistaken.

Those around the table can remove their masks while seated and participating in the meeting. If they are not seated at the table, then they will have to wear their masks. Anyone circulating in the room is asked to wear a mask.

We're ready to begin. Mrs. Vignola and Mr. McLean, this is the second meeting of this study on fossil fuel subsidies.

I would ask those participating in the meeting via Zoom to mute your microphone when not speaking.

That's about all I have to say about that.

I have two quick points for the committee. First, I had hoped to have a steering committee meeting next Thursday, but that's budget day, and I'm told that the whips agreed not to have committee meetings that night. So we won't be able to meet, unfortunately.

Second, for the study, it was proposed that the Commissioner of the Environment and Sustainable Development be invited. His name was not put forward on the lists given to the clerk for the study. I would therefore ask for your permission, exceptionally, to invite him to appear as part of the study. Is everyone in agreement? It seems so. Great.

Ms. Collins, do you agree?

[English]

Ms. Laurel Collins (Victoria, NDP): I'm sorry. I have a point of clarification.

Is this for the fossil fuel subsidies study?

The Chair: Yes. It's to give you a panel list.

Ms. Laurel Collins: Do we know if either the Minister of Finance or the Minister of Environment is coming?

The Chair: I haven't received any confirmation.

Ms. Laurel Collins: Okay. I'm happy to have the commissioner of the environment appear and I really hope that the ministers will also appear.

The Chair: That's noted.

That's pretty much all I have to say before we begin our first panel.

We have with us today from the Canadian Climate Institute, Dale Beugin, vice-president of research and analysis. From Environmental Defence Canada, we have Julia Levin, senior climate and energy program manager. From Indian Resource Council Inc., we have Stephen Buffalo, president and chief executive officer.

We will start with opening statements of three minutes.

We will start with Mr. Beugin.

Mr. Dale Beugin (Vice-President, Research and Analysis, Canadian Climate Institute): Thanks very much for the opportunity to chat about this important issue.

I will draw today on a recent report from my colleagues at the Canadian Climate Institute, Rachel Samson, Don Drummond and Peter Phillips. That paper takes an economic perspective on fossil fuel subsidies. It assesses whether government measures support or hinder Canada's long-term economic growth and a smooth transition for workers and communities, especially in the face of the accelerating decarbonization in global markets.

Our research moves away from definitions of "subsidy" and "inefficiency". It assesses policy according to four criteria. These are transition consistency, value for money, employment outcomes and policy fit.

I'll draw out three specific findings.

First, the global low-carbon transition is a structural shift, not a temporary shock. While governments can be tempted to insulate businesses, workers and communities from market change, impacted sectors and regions will ultimately be better off with strategies that help them prepare for and thrive in the emerging low-carbon economy.

Second, the fossil fuel sector is no longer the secure source of economic growth and job creation that it once was. Coal, oil and gas demand will decline globally, though there is uncertainty on the timing and slope of that decline over the next decade. Public investment in long-lived fossil fuel assets now carries more risk and less certain benefits for society, even within the context of current upheavals in energy markets.

Third, governments must make tough choices in allocating scarce public funds. Public investment in decarbonizing fossil fuel production could generate fewer economic benefits than investment in areas that could capture a share of growing, transition-opportunity markets, such as hydrogen, mining of battery minerals, or low-carbon steel production.

This takes me to five quick recommendations.

The first is that public support for oil and gas firms should prioritize pivots to new, transition-consistent business lines. Carbon capture, utilization and storage, for example, will have the biggest long-term benefits in carbon removal or in addressing process emissions in heavy industry, rather than decarbonizing existing oil and gas production.

Second, Canada should maximize scarce public dollars by making public investments complementary to carbon pricing and other regulatory policies, rather than financing company compliance with those measures. For example, improving methane regulations would be a better approach to reducing oil and gas fugitive emissions than funding those reductions via the NRCan emissions reductions fund.

Third, Canada should explicitly consider future global and domestic market conditions and the risk of stranded assets in all policy decisions. For example, Export Development Canada should continue to ramp down its exposure to fossil fuel production.

Fourth, Canada should focus on mobilizing private investment and sharing risk, rather than fully shifting risk from private companies to public entities. For example, support for cleaning up orphan oil and gas wells should be temporary and targeted at firms most at risk of bankruptcy.

Finally, Canada should prioritize ensuring that new policy measures support transition success, for example, the federal carbon capture, utilization and storage investment tax credit. It can then move toward more difficult measures, such as phasing out fuel and carbon tax exemptions for agriculture.

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

• (1835)

The Chair: Thank you, Mr. Beugin.

We'll go now to Ms. Levin for three minutes.

Ms. Julia Levin (Senior Climate and Energy Program Manager, Environmental Defence Canada): Thank you for the invitation to participate today.

Last month the world's scientists delivered their starkest assessment yet of the frightening future that awaits us if we fail to act on the climate crisis and limit temperature rise to 1.5 degrees.

We know that, to avoid catastrophic climate change, we must transition our economies off fossil fuels in the next decade. We have the solutions to build a clean energy future, and we know that the transition away from fossil fuels will bring far greater energy affordability, security and better jobs.

Today Environmental Defence released a new report on fossil fuel subsidies. We found that in 2021 the Government of Canada provided at least \$8.6 billion to the oil and gas sector through direct subsidies and public financing from Export Development Canada. That's at least \$8.6 billion in taxpayer money that went in one year towards making it cheaper to produce and transport the fossil fuels that are destroying our planet. For context, that's a similar amount to what was announced in the ERP, which is to be spent over seven years.

Our report also provides the first estimate of public funding for carbon capture, utilization and storage projects in Canada. The Canadian public has spent \$5.8 billion since 2000, and collectively those expensive projects are capturing only 3.5 megatonnes of carbon per year, which is 0.05% of Canada's greenhouse gas emissions, and 70% of that captured carbon is used for enhanced oil recovery, i.e., more production; therefore, those huge public subsidies are resulting in more emissions, not less.

Oil and gas companies know these dead-end technologies won't make a dent in emissions but are using them to justify continued and even expanded fossil fuel production.

Unfortunately, as evident in the ERP, the government is falling for it. Carbon capture handouts are set to grow exponentially. Despite raking in massive profits, oil and gas companies are asking governments to pay over \$50 billion to equip the oil sands with carbon capture and have been lobbying for a carbon capture tax credit.

If Minister Freeland goes through with the tax credit next week and makes it available for oil and gas projects, including fossil hydrogen, it would create a significant new fossil fuel subsidy and be difficult to repeal.

The most important steps for decarbonizing Canada's economy are increased electrification, wide-scale use of renewable energy and better energy efficiency, yet these sectors have received limited government support, a fraction of what oil and gas companies receive.

All fossil fuel subsidies are inefficient and must be phased out and, to that end, we are urging the Government of Canada to eliminate all subsidies, public financing and other fiscal supports provided to the oil and gas sector by the end of this year on the timeline that the IEA has said. That includes financial support provided through Export Development Canada without any loopholes for gas, fossil hydrogen or CCUS, redirecting all of that support to the proven kinds of solutions that will do the lion's share of the emissions reduction that are needed and provide a fair transition for all towards a renewable energy economy.

The pathway to zero emissions and a climate-safe future does not include subsidies or public financing for the oil and gas industry.

Thank you, and I look forward to your questions.

• (1840)

The Chair: Thank you, Ms. Levin.

We'll go now to Mr. Buffalo from the Indian Resource Council Inc.

Mr. Stephen Buffalo (President and Chief Executive Officer, Indian Resource Council Inc.): Thank you, Chair and committee members, for the opportunity to speak today.

My name is Stephen Buffalo and I'm the president and CEO of the Indian Resource Council of Canada.

Our organization represents over 130 first nations that have direct interest in the oil and gas industry. Our mandate is to advocate for federal policies that will improve and increase economic development opportunities for the nations and their members. It is with some concern that I speak with you today.

Our organization and our members care deeply about Mother Earth. Many of the things that have been described as fossil fuel subsidies are actual programs and funds that directly support our first nations communities and our involvement in the sector. These go to rectifying some of the economic wrongs that have been done to first nations in the past.

Many of them are programs that are good for the environment and are helping us to reclaim our reserve lands, where we hunt, pick berries and pick medicines so future generations can enjoy them. Still other initiatives are designed to provide relief from the high cost of living for our people, especially those living in rural and remote communities, so that they can have the basic things like heat, electricity, affordable food and access to medical assistance, but because they're involved in oil and gas, they're considered bad.

I understand that some members of the committee want to get rid of these programs. I can't understand that logic. I can't see how that's consistent with the Truth and Reconciliation Commission's calls to action, the United Nations Declaration on the Rights of Indigenous Peoples or the honour of the Crown.

When I first looked at what is considered a fossil fuel subsidy and what the committee is trying to eliminate, I couldn't find any official government sources. I found some reports from NGOs that itemize them, and I'm honestly shocked. One of them is on funding for a diesel generation station in Nibinamik First Nation. The other was on Indigenous Services Canada investment in natural gas and diesel projects, or on electricity price support for the indigenous community.

Honestly, there are no options other than diesel for a lot of places. If you do not think our people deserve heat or electricity because it comes from oil, then that tells a really bad story about what you think about indigenous people.

I also saw that Trans Mountain and Coastal GasLink pipelines were on the list because they got loans, not subsidies. You're probably aware that with Trans Mountain, there are many indigenous groups that are trying to buy that pipeline from the federal government. The business case is strong. However it gets divided up, it's going to provide long-term, stable and predictable revenues for our communities. It's going to help us to be more financially independent and to have money we can spend, which we think is important, rather than what the government decides for us, such as under the Indian Act and that regime.

It's the same with Coastal GasLink. Just this month it was announced that 16 of the first nations along the route have entered into an equity deal to buy up to 10% of the pipeline. They asked the federal government to help out and provide them loans to get them up to 30% ownership, and our government said no because it's a natural gas pipeline. I don't think I need to remind everyone that the world needs cleaner energy.

The thing that bothers me the most is the funding of the orphan and inactive well reclamation program. It's on the list too. As part of the COVID recovery, the federal government committed \$1.7 billion to clean up orphan wells and pipeline facilities.

• (1845)

The Chair: Thank you, Mr. Buffalo.

We're about a minute over time, so we'll have to stop there, but I have a feeling we're going to have an excellent discussion tonight, and everyone will have an opportunity to give their point of view in answer to questions.

We'll start with first round of questions with Mr. Dreeshen for six minutes.

Go ahead, please.

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

Welcome to all the witnesses.

I would certainly like to speak to Mr. Buffalo from the Indian Resource Council.

I know many people who have called or do call your community home. I have coached hockey teams that have played in your arenas, and I know of the services you provide for your people. I listen to you; I talk to you, but I don't talk for you. I think that's really the key issue we have. I have been on the aboriginal affairs and northern development committee where we have talked about the Truth and Reconciliation Commission, honour of the Crown, UNDRIP, and all of these things. We've had discussions with your people, and I think it's so important. We have so many groups—the NGOs, the movie stars, the politicians, the entertainers and governments—all taking their turn to speak on your behalf.

We've just heard of the industry-altering 2030 emissions reduction plan, which is going to affect all natural resource sectors. It will affect the land and those activities like agriculture that are just about, in your communities, helping all of your members. It's going to affect the way you invest and the profitability of your efforts.

I wonder if you could tell us the types of consultations that you had in the development of this plan.

Mr. Stephen Buffalo: We're definitely trying to move forward. Of course, the objective is to eliminate poverty. Canada is blessed with natural resources. No one in Canada should not have access to clean water and better housing, with the social problems that come with being poor. With the natural resource sector, we're definitely trying to strike a balance of protecting the environment and taking care of greenhouse emissions. We're doing that now in the site rehabilitation program here. We partnered with Alberta. We're very proud of what we've done.

With regard to consultation in this whole process, I know that none of my members from the Indian Resource Council were consulted or even asked questions about this fuel subsidy. You know, it begins there.

Mr. Earl Dreeshen: Thank you very much.

I'm just curious to know, from your experience, how many of the NGOs actually represent the aspirations of indigenous communities. Are there NGOs whose work has been detrimental to the goals of your communities? I think you mentioned that you've seen quite a bit of that.

However, trying to keep things going as far as time is concerned, you did speak of the orphan well cleanup joint program with the province and the federal government. You're concerned that in everybody's desire to prove that they know more than you do, this is another thing that they believe should be off the list. There are so many things that have been done on orphan wells, and things that people have learned. I wonder what types of lessons you could tell us about on both the environmental cleanup side and the methane reduction side when it comes to orphan wells.

Mr. Stephen Buffalo: You know, on the orphan well program, we were given \$113 million in Alberta to clean up the first nations land. We have changed over 1,600 wells, pipelines and facilities. Our start date was eight months after everyone else. We are the shining star of this program. We've asked for an extension on it to do more work.

With regard to the methane emissions into the atmosphere, based on the Alberta energy regulation data, out of those 1,600 wells, 933 of them leaked methane. That equates to 2.6 million tonnes of methane per year. So 220 million tonnes of CO2 equivalent equates to about 250,000 cars off the road. We are doing our part. We are cleaning up what mess is there.

Our reserves aren't getting any bigger. Our land mass isn't getting bigger. Our population and our demographics are growing, so we have to clean the land. This is one program that we're very proud that we've been able to work in partnership with not only the Government of Alberta but industry itself. It's employed over 250 young first nations who have taken pride in cleaning the land.

• (1850)

Mr. Earl Dreeshen: Thank you. You know, if you look back at history, it wasn't too many centuries ago that wood, animal fat, dung and so on were the fuels used by all of our ancestors. Of course, billions of people on this planet still use this for their basic needs.

I'm curious; are there any groups that you know of that have the compassion and foresight to speak for those people? Or are these actions just focused on redesigning the modern western world, of which you are a part and have had certain experiences with in your nations' lifetime?

Mr. Stephen Buffalo: You mentioned a bit of our history and what has been utilized in the past. As time has evolved, so has technology. When I see fishermen in Musqueam coming in to shore, they're not paddling. They're using two big, heavy, high-powered boats. That's for efficiency. Some of our people are still out trapping. They're using a powered snowmobile or four-wheeler. Again, it's for efficiency. These are things that we just had to adjust with.

As far as I can tell, I've never met a first nation who proudly declares that an NGO speaks on their behalf in regard to their space. The leadership in each community really makes their decisions as to what's best for their people because of the system we live in. You know, we talk about this direction, but we never talk about the Indian Act and what it's done to us. There hasn't been a federal party yet to really step up and help us eliminate that—not the Conservatives, not the Liberals, and not the Green Party or the Bloc.

The Chair: Thank you, Mr. Buffalo.

We'll go now to Ms. Taylor Roy for six minutes.

Ms. Leah Taylor Roy (Aurora—Oak Ridges—Richmond Hill, Lib.): Thank you very much, Mr. Chair, and I'd like to thank all the witnesses for being here and presenting their introductory remarks.

I'd like to start with Mr. Beugin from the Canadian Climate Institute.

Mr. Beugin, I was pleased to see from your background that you're an expert in both environmental policy and economics. In balancing the two, I think your remarks reflected that. I think we all know how important it is to be sure that with our environmental policies we are also ensuring that there is economic growth, a place for supporting our economy.

I am wondering about this. In the 2021 mandate letter for the Deputy Prime Minister and the Minister of Finance, it instructed Minister Freeland to “Work with the Minister of Environment and Climate Change, and with...the Minister of Natural Resources, to accelerate our G20 commitment to eliminate fossil fuel...from 2025 to 2023...”

Do you believe that Canada can meet that target while maintaining a strong economy? Secondly, do you think it's the right time to do it, because we're obviously in a transition and it's a challenging time? Do you think that's possible?

Mr. Dale Beugin: Member, just as a clarification, please, are we talking about the target of achieving emissions reductions or the target of phasing out fossil fuel subsidies?

Ms. Leah Taylor Roy: I'm talking about phasing out fossil fuel subsidies.

Mr. Dale Beugin: I think my remarks suggest that in fact phasing out fuel subsidies, in lots of cases, can support economic growth, and that prudent management of public funds is a key part of long-term prosperity. In the face of global transitions and big shifts in international markets, 90% of global GDP has committed to achieving net zero.

If they follow through on those commitments, that represents a seismic shift in demand for fossil fuel products and absolutely changes the long-term payoffs of investments, both public and private, in the sector. In terms of sustaining economic growth and prudently managing public dollars, phasing out that support makes economic sense as much as environmental sense.

Ms. Leah Taylor Roy: Thank you.

Basically it sounds like you're saying that this shift is going to happen regardless of what we're doing. We're actually just taking funds from one area and putting them into something that would be more productive, because that fundamental shift is going to happen in any event.

Mr. Dale Beugin: And we'll get better return on public dollars in other areas.

Ms. Leah Taylor Roy: That's very good. Thank you so much.

Mr. Buffalo, I have a question for you as well. I was very interested in your remarks and the perspective you're bringing, and I thank you for being here representing first nations.

As Mr. Dreeshen said in his introductory remarks, we can't speak for first nations. We can't represent you. We have to work with you.

We have heard from other representatives of first nations who don't share your view, who have a different perspective on fossil fuels, the industry and what should be done.

Would you agree that there are a great diversity of views within first nations regarding fossil fuel development?

• (1855)

Mr. Stephen Buffalo: Absolutely, but that comes with a lack of understanding. Of course, when you start putting science behind money and money behind science, you're going to have polarized views, and of course, when we talk about public money, that's all money that was generated from somewhere. Right now we're see-

ing a government that just opens a tickle trunk and they pull out this money to support certain things. The polarization is definitely there.

I know we lack a lot of capacity in certain areas, and there's misinformation. Of course, when it's only one-sided, when the government is only allowed to say one thing about certain issues, then without a balanced consultation.... Like I said, none of our members were ever consulted in this. You might have spoken to nations or people who support fully shutting down this sector, but it has provided so much for us.

Ms. Leah Taylor Roy: Right. Are you saying that the first nations representatives who are for shutting down the sector do not know what they're talking about?

Mr. Stephen Buffalo: No, not at all. I'm just saying that they haven't heard the side of what the oil and gas sector provides.

Ms. Leah Taylor Roy: Why do you think that is?

Mr. Stephen Buffalo: Why do I think that is? Well again, there's a lot of messaging that isn't clear, and it isn't given properly in information.

Right now we have teachers telling us that the oil sands are bad when actually the revenue it provides and the jobs that it provides are still a good thing. With the carbon capture, yes, it might not meet everything that you're looking for today, but it's getting close, and I'm betting on the future generations to fix that for us.

Ms. Leah Taylor Roy: Thank you.

You did also mention that you and the group you represent have a lot concern for Mother Earth and for the environment. You mentioned that there were some projects that you feel are good for the environment. I was wondering if you could give me an example of a program in the fossil fuel sector that you feel is good for the environment.

The Chair: Answer very quickly please. We have 25 seconds, but there's plenty of time for an example or two.

Mr. Stephen Buffalo: If a first nations invested as an owner of, for example, the Coastal GasLink, that's revenue that isn't governed under the communist system of the Indian Act. That's the positive it brings.

We're so far behind in this. We're not included in these discussions. You only include the ones that really agree with what you're saying. That's part of the problem.

Ms. Leah Taylor Roy: I'm glad you're here today then.

Thank you.

[*Translation*]

Mrs. Julie Vignola (Beauport—Limoilou, BQ): Thank you very much.

Ms. Levin When you appeared before the Standing Committee on Natural Resources last month, you stated that, even with carbon capture and storage, we would only be able to remove between 3% and 9% of the carbon produced throughout the life cycle of oil and gas.

In the current Parliament, Mr. Wilkinson has publicly stated that carbon capture, utilization and storage technology, or CCUS, wouldn't be in the toolbox by 2030 due to its commercial maturity and costs. However, we witnessed a dramatic turn of events this week when we were presented with the 2030 emissions reduction plan, which contains a tax credit for the CCUS.

Can you comment on this announcement in light of Mr. Wilkinson's statements, and also on what would be achievable in the next five to seven years with respect to green energy?

I would appreciate it if you could do that in two minutes, since I don't have much time.

[English]

Ms. Julia Levin: Mr. Wilkinson has said various things about CCUS. In the past he has gone on record saying that carbon capture and storage won't be part of the 2030 tool kit because of the timelines that are required to design and build these projects, yet he put forth a plan that banks heavily on CCUS to do a lot of the lifting in terms of emission reductions. Similar comments have been made in the past by Minister Guilbeault, that certainly CCUS doesn't have a role to play in 2030. I would point out that discrepancy.

It's just very risky to gamble on an unproven speculative technology to do a lot of the emission reductions that we're expecting to happen before 2030 in terms of global capacity. I spoke of Canada's capacity where we're capturing less than 0.05% of our emissions and most of that is actually going for enhanced oil recovery.

This technology has existed for 30 to 40 years and has been heavily subsidized for that same time frame, yet we're still only capturing less than 40 megatonnes globally. That's 0.001% of the world's greenhouse emissions. It is a technology that has shown itself to over-promise and under-deliver.

One of the real issues with carbon capture and storage in the oil and gas sector is that it ignores 80% of the problem, which is the downstream emissions coming from burning the fossil fuels in our cars and our homes.

• (1900)

[Translation]

Mrs. Julie Vignola: Thank you very much, Ms. Levin.

I understand that the successes in reducing greenhouse gas emissions are more notable in Europe and that their laws are tougher than ours, particularly in the United Kingdom and France. This is coupled with the will of the members of the European Union, which is ultimately paying off.

Yesterday, we learned that, in 2021, solar energy sources grew by 23% and wind energy sources, by 14%, not to mention other energy sources, such as geothermal energy.

We often hear that a predictable regulatory and policy environment is of paramount importance if Canada is to attract truly forward-looking investors for future generations.

A study by the Ember group recently revealed that a 20% growth rate in green energy over 10 years would limit global warming to 1.5°C.

Ms. Levin, the economic potential of a massive investment in green energy is obvious to me, especially from the government, which would finally set an example and get the ball rolling. What do you think about this?

Would the economic benefits be as good as the environmental benefits for present and, above all, for future generations?

[English]

Ms. Julia Levin: We really need to be investing in scaling renewable energy power here in Canada, where we are definitely below our potential in renewable energy capacity and the part of our mix that comes from renewable energy outside of hydro. The return on investment is enormous. Building new renewable energy power is cheaper than running existing fossil fuel energy production. In terms of job creation and co-benefits, cleaner air and jobs in every community across the country, there's no question that investing in renewables is necessary.

Public support is also necessary, because fossil fuels have a huge incumbent advantage over the renewable energy sector. That's why we need to put public dollars behind the things we want to see. So far, we've seen less than \$2 billion over four years promised for the renewable energy sector. There was an investment tax credit also promised for renewable energy and batteries. We haven't seen any movement on that one, yet we're steaming ahead on the carbon capture tax credit and continued fossil fuel subsidies.

[Translation]

Mrs. Julie Vignola: Thank you very much.

Are you aware of the demands of people working in the oil energy sector who are concerned about the transfer of their skills to the renewable energy sector?

[English]

The Chair: You have 15 seconds, Ms. Levin.

Ms. Julia Levin: I'm not sure about the fears, but definitely in recycling in all sectors—in our EVs, our batteries and our renewable energy—it's important that we really build the kind of circular economy approach to the solutions we want to see, to minimize the environmental impacts. We also have to be thoughtful about those supply chains and make sure we're not causing undue harm to the communities whose land they're on—

The Chair: Thank you. I'm sorry to interrupt, but it's the only way we can get everyone's questions in.

We'll go to Ms. Collins for six minutes, please.

Ms. Laurel Collins: My first question is for Ms. Levin.

I'm wondering if you can respond to the suggestion that we should move away from strict definitions of subsidies and efficiency. To meet the government's international commitments to phase out fossil fuel subsidies, don't we need a clear definition of what a subsidy is and, ideally, a definition that aligns with internationally agreed-upon standards?

• (1905)

Ms. Julia Levin: Yes, I would say that having clear definitions is helpful in terms of making sure that globally we're addressing this issue in the same way. I do take the point that sometimes we get so lost in these definitions that we miss the forest for the trees, and that can be very dangerous.

I think a simple definition is that any type of public support—public funding—that goes to the sector is a subsidy and has to be eliminated.

My worry with “inefficient” is that because there is no agreed-upon definition for “inefficient”, governments like Canada's can use that as a loophole to continue subsidizing the fossil fuel sector. Countries like Italy, as you heard the other day, have just said that all subsidies are inefficient, so that's one way to approach it.

I think there's a balance between making sure that we have agreed-upon language that doesn't let governments use weasel words to get out of real action but that also lets us have comparable targets with our peers.

Ms. Laurel Collins: Thank you so much.

As a follow-up to that, you mentioned Italy, but also, the U.K. has recently found that all fossil fuel subsidies are inefficient. As Canada is proceeding with our long overdue G20 peer review process with Argentina, what do you think Canada can learn from these conclusions?

Ms. Julia Levin: One of the most important conclusions is just the sense of urgency. Most countries finished their peer reviews in 12 to 16 months. Canada is approaching the four-year mark and we still haven't seen the self-review portion, let alone when the two countries share.... It really exemplifies the lack of urgency with which the government has tackled this issue.

We've talked about the time frame going from 2005 to 2030, but I'll remind committee members that this was a promise made in 2009. We've had a lot of time to act on it.

In terms of findings, I would highlight some of the peer reviews that were done, especially Italy's peer review, but also, the U.S. and China had a peer review with a lot of.... One thing is the inventoring, but more important is the reform and looking at what the other peer reviews have put forward in terms of steps to actually reform their fossil fuels.

Ms. Laurel Collins: Thanks so much.

In 2021 alone, Export Development Canada provided over \$5 billion in public financing for fossil fuels. If the government is going to make good on their promise to end public financing of fossil fuels, do you have recommendations for changes for the Export Development Act?

Ms. Julia Levin: I think we have to put exclusionary principles within the act. We focused on EDC as a Crown corporation, but there are so many Crown corporations that are giving money to the fossil fuel sector, and the problem is that no one is tracking it. This is a really onerous task that is falling into the hands of two or three people within the Canadian climate movement, and that's it. No one else is tracking this. CDEV, TMC...there are tons of corporations.

We need legislation. What we're asking for in terms of implementing the promise that was made to phase out fossil fuel financing is broader legislation that prohibits—puts exclusionary policies in place towards—any fossil fuel financing, including oil and gas through false solutions, through gas and through CCUS, because just this week, actually, EDC created a new transition bond that is going to double down on CCUS, and that's kind of what we're seeing happen.

The shift in the country is in realizing that we can't talk about fossil fuel subsidies the way we did before, so we're just going to call them CCUS and we're just going to call them fossil hydrogen, but we're going to take the exact same amount of money and just put it to those technologies and pretend that they're not subsidies anymore. We need policies that really address that issue.

Ms. Laurel Collins: If you were to pick one or two subsidies that would be at the top of your list for elimination, what would they be?

Ms. Julia Levin: EDC support is by far the greatest part of Canada's support to the sector. Putting in place exclusion of policies at Export Development Canada is a huge step. You mentioned \$5 billion this year. Most years, it's \$13 billion. This was a slow year for EDC.

Beyond that, I would put in place, rather than individual subsidies to be eliminated.... There are just so many. NRCan has at least 10 different funding programs, and we have programs that aren't fossil fuel subsidies but, without strict climate conditions, might give huge amounts of subsidies to the fossil fuel sector, like the \$8 billion net-zero accelerator.

We need strict conditions on those and we need binding legislation to ensure that none of the funds will go to the fossil fuel sector.

• (1910)

Ms. Laurel Collins: In today's report, you list a number of programs that could easily become fossil fuel subsidies if green strings are not attached. Can you talk a bit about the need to have climate conditions on government spending?

Ms. Julia Levin: The big one there is the \$8 billion net-zero accelerator. Generally, we've been talking about the oil and gas orphan well cleanup. If that had gone to nations or to communities to clean up their own oil and gas wells, that would have been an excellent use of public money. The problem is that the lion's share of that money went to CNRL. It went to Suncor. They paused their own spending and used public dollars, so there was no extra reclamation from or jobs created by those companies.

There are so many examples of the kinds of employment and environmental conditions that we should be placing on these programs.

The Chair: Thank you.

We'll go to Mr. McLean now. We're in the five-minute round.

Mr. Greg McLean (Calgary Centre, CPC): Thank you very much.

Thanks to the witnesses for the scintillating information here. I really appreciate it.

Let me start off with something that I hear the witnesses focusing on. I'm going to go to Mr. Beugin.

Mr. Beugin, we talk about EDC here and the \$8.6 billion in loans it's providing as an inefficient subsidy. Are loans considered a subsidy, if you will, when they are market-based?

Mr. Dale Beugin: I think it depends on the rate. If they are preferential loans that give the proponent rates that are better than they could receive in the market—

Mr. Greg McLean: Are they preferential loans?

Mr. Dale Beugin: In some cases, yes, they are.

Mr. Greg McLean: How preferential are they?

Mr. Dale Beugin: I don't have a numerical answer to that question at hand.

Mr. Greg McLean: Okay. I'll move on.

That being the case, they are paying interest, so you wouldn't consider it a subsidy if it was a grant, as opposed to a loan—

Mr. Dale Beugin: It would be a different—

Mr. Greg McLean: —like all the alternative energies receive, the grants and a CCA rate of 100% on the equipment installed. Those wouldn't be considered comparable subsidies as a loan that pays interest.

Mr. Dale Beugin: I think both can be considered subsidies. It's a question of how big the subsidy is.

Mr. Greg McLean: It's how big and how deep it has to go. That's correct.

With the \$8.6 billion being paid back, along with interest, would you still consider it a subsidy?

Mr. Dale Beugin: If the rate is better than they could receive from market value from the capital markets, yes.

Mr. Greg McLean: It's not a deep subsidy. It's not \$8.6 billion worth of subsidy, but maybe 1% of \$8.6 billion.

Mr. Dale Beugin: It's a fraction of the piece, rather than the whole.

Mr. Greg McLean: Good. Thanks very much.

Would we agree that \$8.6 billion is a bit of a stretched number?

Mr. Dale Beugin: I think it's probably smaller than that. Yes.

Mr. Greg McLean: Thank you.

You talked about 90% of global GDP being committed to a net-zero future. Can you tell me where that 90% of global GDP is committed? How has it performed so far in reducing greenhouse gas emissions around the world?

Mr. Dale Beugin: That comes from commitments to achieve net-zero under the national climate process.

Mr. Greg McLean: Like this government, it's in word so far, but there are no actual results. In fact, there are negative results. It has actually grown GHG emissions in 90% of these countries.

Mr. Dale Beugin: Not all of those countries have yet implemented policies. You are correct. That being said, the risk of them acting on their commitments should be taken seriously.

Mr. Greg McLean: Yes, I agree. The risk of them not acting on their commitments should be taken seriously—

Mr. Dale Beugin: The risk of them acting should also be taken seriously. The risk of them moving, committing and following through on those commitments should be taken seriously.

Mr. Greg McLean: Okay.

I'll move to Ms. Levin at this point in time, because you talked about carbon capture, utilization and storage.

Ms. Levin, the International Energy Agency talked about the necessity of carbon capture, utilization and storage being a part of the 2050 goals put forward by COP26, saying that the most tangible 7% of reductions would happen with CCUS. However, you're saying it's not a good subsidy. Is that correct?

Ms. Julia Levin: I'm saying what the IPCC scientists are also saying, which is that the best path to a 1.5°C future includes carbon dioxide removal, but through natural, nature-based solutions and not through engineered CCUS. Certainly, both the IEA and the IPCC don't allow for...

The lion's share of that CCUS that's in the IEA's net-zero road map is actually not for the oil and gas sector, but sectors like cement. They're some of those niche sectors that we will still need in 2050, when we don't know what other decarbonization options are there.

Mr. Greg McLean: We won't need energy in 2030.

Ms. Julia Levin: Certainly, we will need energy.

Mr. Greg McLean: Where will all that energy come from in 2030? Can I get some kind of postulation from you?

Ms. Julia Levin: The energy will come from a mix of renewable sources. In addition, we will have energy efficiency measures that greatly decrease the amount of energy that is required.

A combination of those things has been modelled for countries and for the world in allowing us to achieve our climate targets and still—

• (1915)

Mr. Greg McLean: Thank you.

You do realize that none of this modelling actually works and hasn't worked to this point in time. In fact, we continue to consume more power everywhere around the world, including in Canada. Technology takes more power. Everything we do in society takes more power.

We're potentially going to need more power in Canada, despite the fact that we're more efficient. We've become four times more efficient in the last four decades with our power consumption, but we still consume more power. We're a power-intensive society.

Ms. Julia Levin: I agree that we have to do—

Mr. Greg McLean: You're thinking that there's going to be that interruption. Do you think that's going to change?

Ms. Julia Levin: Yes, I think it is changing. There are huge investments being made.

The Chair: That's a good, succinct answer, Ms. Levin. Thank you.

We'll go to Ms. Thompson for five minutes.

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

Ms. Levin, I will continue with you to start. Thank you to all the witnesses for coming this evening.

Thank you as well for sharing the report from Environmental Defence. In reading that, I noted in the executive summary the tally of how much financial support has been provided to fossil fuels by the federal government.

Could you clarify if this dollar amount cites the wage subsidy, the Canada emergency response benefit and the federal payments to western provinces for oil and gas cleanup?

Ms. Julia Levin: The oil and gas cleanup was in our 2020 report and was not included in our 2021 report.

In our 2020 report, we found that \$18 billion went to the oil and gas sector. That was included because most of that money went to Suncor and CNRL, which are companies that have targets in terms of their own cleanup work. They paused their own cleanup work, took public dollars and didn't do any extra work, so it was a fossil fuel subsidy.

In terms of the wage subsidy, we also did include the part of the wage subsidy that went to oil and gas companies. It was a huge underestimation, though, because so little of that information is made available.

Ms. Joanne Thompson: Thank you.

Following that thread, in the executive summary you also stated that real climate solutions are not being properly funded.

To this end, something I see in my riding.... The federal government spent \$100 billion since 2015, but in my riding of St. John's East, in 2021, for example, \$4.8 million federal dollars were committed to the low-carbon economy leadership fund to support 13 climate action funds in the city. The provincial government also

contributed to this. Between 2019 and 2021, clean technology innovation and research development as part of the transition funding was \$51.8 million with almost \$10 million from the province.

These are just two examples. Could you speak to this in relation to climate solutions not being properly funded?

Ms. Julia Levin: The \$100 billion number includes a range of things that aren't actually about building climate solutions. It's a number the government throws around, but there's never any documentation of the things that are in there. I would love to see more fulsome documentation. Mostly, a lot of it is infrastructure spending that isn't actually for climate solutions.

I'm happy that those investments in your community are there. I'm not saying the government has done nothing on renewables. I'm just saying it's a fraction.

Take EDC, for example. In most countries in the world, the public financing ratio between fossil fuels and renewables is 2:1. In Canada it is 14:1. We have a tremendously bad track record in terms of support to fossil fuels instead of support to climate solutions that make everyone's lives better.

Ms. Joanne Thompson: Thank you.

I want to move on to other questions, but I do want to note that it's a very broad statement that solutions are not being properly funded.

I want to reference the 2022 report, "Blocking Ambition: Fossil fuel subsidies in Alberta, British Columbia, Saskatchewan, and Newfoundland and Labrador" by the International Institute for Sustainable Development.

Canadian provinces also spend public funds to incentivize fossil fuel development and forgo substantial uncollected royalties and tax revenues. The report states that in the fiscal year 2020-21, the Government of British Columbia provided \$765 million in fossil fuel subsidies. The Government of Alberta provided \$1.32 billion.

Could you speak to how federal spending on fossil fuel subsidies compares to that of other levels of government? In other words, this is really a provincial-federal reality.

• (1920)

Ms. Julia Levin: For sure, we have to phase out subsidies at both the provincial and federal levels. The difference is that almost all of the subsidies at the federal level are production subsidies, and at the provincial level you have a mix of production and consumption subsidies, and not so at the federal level.

I would encourage the federal government to show leadership. It's the only level of government that has made commitments around reforming fossil fuel subsidies. That is also the case now in British Columbia, because it is reforming its royalty regime to make sure it doesn't subsidize oil and gas. A lot of work needs to happen at the provincial level, for sure.

Ms. Joanne Thompson: I want to get another question in, and I think I'll probably—

The Chair: You can get in a comment, but not an answer at this point.

Ms. Joanne Thompson: Basically, can the federal-provincial subsidies help shift to less polluting methods or renewable energy? Is there a capacity to also be part of the transition?

The Chair: The answer to that might have to come at another opportunity.

Ms. Joanne Thompson: Thank you.

[*Translation*]

The Chair: Mrs. Vignola, you have two and a half minutes.

Mrs. Julie Vignola: Thank you, Mr. Chair.

Ms. Levin, as we know, Canada provides 14 and a half times more assistance to the oil sector than to the renewable energy sector, yet it's the renewable energy sector that we need to get going as quickly as possible.

What regulatory or policy tools do you think are required to properly establish investments? Should we bring Export Development Canada into line?

I would also like you to tell me about green finance as a way forward and about opportunities for investors.

[*English*]

Ms. Julia Levin: The EDC has a tremendous role to play in helping emerging Canadian companies take advantage of opportunities in both Canada and internationally. It's an export credit agency, but its mandate has been really reformed to focus at the domestic level, so there is a tremendous opportunity at the EDC.

There are others. I would love to see tax credits made specifically for renewable energies. The government has made important promises, like the clean electricity standard. We have to make sure that it's robust enough, so that natural gas can't squeak in, because that would be a giant missed opportunity.

There is a lot on the table in terms of growing our renewable energy sector. We need more ambition. We need to move more quickly, and we have to make sure that the funds are there.

[*Translation*]

Mrs. Julie Vignola: Thank you.

Let's go back and imagine for a few seconds that the government had invested 14 and a half times more money in the renewable energy economy over the past 30 years than it did in the oil economy.

What impact would this have today, especially on health care?

[*English*]

Ms. Julia Levin: It would certainly be better, without a doubt, and I have to speculate on the impacts, but I imagine better jobs. We know that investments in renewable energy are just much better in terms of the job creation potential. There is cleaner air, and communities are further along, having more control over their own energy sources. There are really countless benefits.

If we had taken an opportunity 20 years ago... We have to start today. This is still a reality that we can get to if we work hard.

[*Translation*]

The Chair: You have 15 seconds left, Mrs. Vignola.

Mrs. Julie Vignola: Could you tell me quickly how much pollution costs annually in health care, especially for lung and heart disease?

The Chair: Do you have a round number to give us on that, Ms. Levin?

[*English*]

Ms. Julia Levin: I have a number that was put forward by the Canadian Medical Health Association five years ago, and it was \$53 billion each year—

[*Translation*]

The Chair: Great.

[*English*]

Ms. Julia Levin: —in health costs, because of burning fossil fuels.

[*Translation*]

The Chair: Thank you very much.

Ms. Collins, you have the floor.

[*English*]

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

Again to Ms. Levin, Canada's biggest emitters are paying the lowest carbon tax rate, contributing only one-fourteenth of the full carbon price. Oil and gas companies are currently making record profits.

Shouldn't these companies be paying the price of their own pollution?

Ms. Julia Levin: One thing we had in our report was a case study of Suncor to quantify the level of subsidy through exemptions and carbon pricing. Suncor should have paid \$880 million in 2020, based on the amount of carbon pollution it had. It only paid \$59 million. That's a \$770 million subsidy for one company. That doesn't even count its downstream pollution.

What we really need to be doing is urgently fixing the carbon pricing regime, so that it actually applies to all of the emissions from the oil and gas sector. What we don't need is a CCUS investment tax credit. We need a carbon pricing system that works.

● (1925)

Ms. Laurel Collins: Clearly, these carbon tax loopholes are a fossil fuel subsidy.

Ms. Julia Levin: Yes, they are. It's just that no one has been able to quantify them, because it's a really onerous tax. We leaned on the work of CICC to get some of our numbers, but it's an enormous fossil fuel subsidy. It's a tax break.

Ms. Laurel Collins: I'm assuming you would, but would you support legislation with a formal and binding commitment not to introduce any new fossil fuel subsidies? Are there other paths forward that you see?

Ms. Julia Levin: We are calling for exactly that, a binding commitment, since we're 13 years in, and we've seen very little action on this.

We also need those green streams.

In addition, we haven't talked about cancelling TMX. That's one of the most egregious examples of fossil fuel subsidies that I've seen in Canada.

A binding commitment is certainly what we're calling for.

Ms. Laurel Collins: Why are the subsidies for the decarbonization of fossil fuel production both environmentally and economically dangerous?

Ms. Julia Levin: When they go to oil and gas companies.... There's this notion—Minister Wilkinson has said this a lot—that, if you're paying an oil and gas company to decrease their emissions, it's not a fossil fuel subsidy. It's confusing to me. That is lowering the cost of business. It's leaving them with more profits. We see what they do with those profits; they give them to shareholders and to CEOs in bonuses. There's this false dichotomy that you can pay a company for this and not that.

The Chair: Thank you very much.

Mr. Carrie, you have five minutes, please.

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

I want to thank the witnesses for being here today.

I come from Oshawa. In Oshawa we have quite an auto industry history. We have had some challenges recently, but General Motors has invested again in our community. Part of that has historically been assistance from the government.

Ms. Levin, how do the subsidies in the oil and gas sector compare to subsidies and support in other sectors such as agriculture, manufacturing and things like that? Canada does tend to have certain advantages because of our resource sector and our people, and we tend to support those sectors.

How would you say these subsidies compare to support in other sectors?

Ms. Julia Levin: The oil and gas sector is the most subsidized sector. I can't compare it to fertilizer and manufacturing because no one has done the work of documenting those subsidies. That speaks to a lack of transparency. We do the work of documenting fossil fuel subsidies as an NGO, but the government doesn't do it, and they don't do it for any other sectors, so it's very hard to make those comparisons.

Mr. Colin Carrie: That's interesting for our world role and our place in the world. I know that, with the automotive sector, one of the reasons the government has different tools in its tool box is to allow us to be competitive internationally. Sometimes, because of different policy reasons, it may be very expensive to do business in Canada versus other parts of the world. When we're looking at one of our natural advantages such as fossil fuels, Canada could be providing the world with the cleaner—relatively speaking—sources of energy that we are going to be needing into the future.

We may not be able to do it competitively if we don't have these different tools in the tool box. If we give up these subsidies and other countries don't, how do you think that's going to affect the overall greenhouse gas emissions from fossil fuels around the world? How will they be affected if Canada destroys our own industry but other countries decide not to do that in the same way?

Ms. Julia Levin: I'm banking on countries taking climate change seriously. Canada is a laggard; we're not a leader on this. More generally, Canada has the dirtiest oil in the world—the fourth dirtiest in the world. This came through in the ERP, this idea that we could have the cleanest and most competitive oil, but that doesn't play out in reality.

The technologies that exist to lower emissions exist everywhere. There's this magical thinking that only Canada will be able to slightly clean up our oil. That just doesn't bear out in reality. We know that our oil, because it is among the dirtiest and the most expensive, is the first that will get left behind in the energy transition.

The question is: Do we bury our head in the sand and pretend it isn't happening, or do we take care of the communities and the workers who are dependent on the sector today and make sure that, when the sector collapses, they aren't left behind? Will we repeat what we did with cod, or will we learn from that?

• (1930)

Mr. Colin Carrie: I don't think burying our heads in the sand in any way is what any politicians around this table want to do, but we do want to make sure that Canadians are able to put food on the table and that we're not cutting off our own future when other countries like China, India, Brazil and some of these other countries may not be going that same route.

I want to ask a question, because Mr. Buffalo was very enlightening when he said that some of these things that are being called subsidies are actually programs that benefit different communities, particularly his community. Sadly, there doesn't appear to have been proper consultation with indigenous communities in regard to listing these different subsidies.

I'm wondering, Ms. Levin, if you could comment on that. Do you think that's the right approach to be taking?

The Chair: You have 25 seconds, please.

Ms. Julia Levin: I think it's incredibly important that we don't take away subsidies that give energy security to indigenous nations. To put that in context, out of the \$18 billion, it was \$3 million. I would say that \$3 million should stay. Out of the \$8.6 billion, it was \$2 million. That \$2 million should stay.

However, that's not most of what we're talking about. I would support more money going to help indigenous communities transition or develop, whatever decision-making that nation wants to do.

The Chair: Thank you.

Mr. Weiler is up next.

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

I'd like to also thank the witnesses for joining us today.

I'd like to ask my first question to Mr. Beugin.

You've been very complimentary of carbon pricing as the most efficient tool to reduce emissions, and for Canada to do more and faster reduction of emissions—as our Minister of Environment and Climate Change said—from our largest and fastest and growing source of emissions. Do you see a role for government to support reducing emissions on top of what would be feasible through regulations alone?

Mr. Dale Beugin: To be clear, is this support in addition to carbon pricing and regulations?

Mr. Patrick Weiler: That's exactly it, yes.

Mr. Dale Beugin: I think carbon pricing and flexible regulations should be the backbone of a cost-effective policy that will minimize costs to achieve deep emissions reductions.

That being said, there are things that carbon pricing doesn't do. It doesn't necessarily provide full support to innovation and research and development. There's a case for subsidies there. It doesn't provide incentives to build infrastructure that private individual firms might not build. However, all of them together can work more efficiently. All of those things create room for additional support, information, and providing additional certainty about long-term carbon prices, perhaps through support from the Canada Infrastructure Bank.

All of these kinds of complementary policies can make carbon pricing work even better, both in terms of effectiveness in reducing emissions and in the cost-effectiveness of minimizing costs.

Mr. Patrick Weiler: Thanks for that.

One of the other points you made in your opening remarks was that Canada should make tough choices by investing in areas with scarce public funds. One of the areas you mentioned is a sector that could thrive in a low-carbon future, which is hydrogen.

I was hoping you could speak to the opportunities you see in hydrogen, both blue hydrogen and green hydrogen, and how you see those competing over time.

Mr. Dale Beugin: Both could play significant roles on pathways to net zero to 2030, and on to 2050, and both should be part of the playbook. Ideally, policy is less technology prescriptive rather than more prescriptive. It lets the market determine where there are the

most cost-effective opportunities to reduce emissions and contribute to economic growth. Options should be kept open, absolutely, with respect to both.

That doesn't mean that they will necessarily play out and evolve into game-changing technologies, but they very well might. Both domestic and international markets are going to be increasingly demanding low-carbon fuels.

Mr. Patrick Weiler: Thank you.

I'd like to ask my next question of Ms. Levin.

You made the point earlier on that we need to electrify our economy and invest in renewable energy. These are some of the things that we're already doing through the pan-Canadian framework; the healthy environment, healthy economy strategy; and, of course, the ERP, which was just announced yesterday. This is a lot of the low-hanging fruit that we really need to focus on, but there's going to be a point where we'll have harvested all of that low-hanging fruit and it's not going to get us all the way to net zero.

I am wondering if you see a role for government to invest in R and D, in moon-shot technologies and other pilots, which may not bear fruit right away but down the road could be critical, not only for Canada but also for other countries to have deep decarbonization.

• (1935)

Ms. Julia Levin: I certainly do. We need to have R and D in areas that are not going to play a role in the next 10 years but will later on.

I will say that with those low-hanging fruit parts of the equation, that's 80% of our emissions. That will take us a lot of the way there, and then some extra R and D into some of the areas that might play a role. It just shouldn't go to the companies that are fuelling the climate crisis.

Mr. Patrick Weiler: The report that Environmental Defence released earlier today was very critical of CCUS.

There are all types of different applications of carbon capture. One that I am curious about and ask that you speak on is Environmental Defence's position on the role of direct air capture, in terms of not only reducing current emissions but also reducing legacy emissions that have already been emitted.

The Chair: You have 20 seconds, please.

Ms. Julia Levin: We should be doing R and D, but we shouldn't be making climate plans assuming that will pay off. Oil and gas companies shouldn't be doing R and D. NRCan has \$400 million to do that. If the tax credit is only for cement, or some of these R and D purposes, that's okay to go ahead, as well.

The Chair: I want to thank our witnesses for a very stimulating discussion, one could say debate. I know everyone's testimony is going to contribute very much to the report we will be writing at the end of this study.

Thank you very much. We're going to pause for a moment, so we can connect virtually with the witnesses for the second panel.

[Translation]

I'd like to thank all the witnesses for their testimony, and I'd also like to thank them for presenting their views on today's issue. We look forward to seeing you again, perhaps in another context.

We are going to take a real break to welcome the next panel.

• (1935)

(Pause)

• (1935)

[English]

The Chair: We will go to our second panel. We have two witnesses.

As an individual, we have David Gooderham. From the Macdonald-Laurier Institute, we have Dr. Heather Exner-Pirot, senior policy analyst.

We will begin with Mr. Gooderham, for three minutes, followed by Dr. Exner-Pirot.

We will dive right into questions after that.

Go ahead, Mr. Gooderham.

Mr. David Gooderham (As an Individual): Thank you.

I'm going to speak about proposed subsidies and tax credits to support CCUS in the oil sands. I invite the committee to examine the plan in the context of Canada's climate predicament.

We need deep reductions, nationally and globally, within the next nine years. Our ability to make essential cuts by 2030 should be the decisive criteria for this committee's study of CCUS.

An objective of CCUS deployment is to facilitate continued expansion of oil production for another 10 years, and maintain high production levels through to 2050, but CCUS can only decarbonize the production process inside Canada. Those emissions represent less than 15% of emissions associated with every barrel we produce. The other 85% occur after our exported oil is burned as fuel, and the emissions are released as tailpipe emissions.

Those downstream emissions from our exported oil cannot be removed from the atmosphere once they are released. Direct air removal technologies do not exist. The fact that we do not count them does not halt the warming.

The IEA's "Net Zero by 2050" report warns that to have a realistic chance of keeping warming below 1.5°C, global consumption must decline 25% by 2030, 50% by 2040 and 75% by 2050.

In contradiction to that, the CER's new evolving policy scenario shows Canada's oil production will continue increasing until 2032. The CER has refused to examine what future pathways of oil production in Canada would be consistent with staying within 1.5°C.

The IPCC 2018 report found all releases of CO₂ must reach net zero by 2050 to give us a chance of meeting the 1.5°C goal. That's trite. We are all talking about that.

A second crucial finding was that in order to achieve net-zero by 2050, annual global emissions must be reduced 50% by 2030. The unforgiving 2030 deadline is explained by the rising atmospheric

carbon concentration load. It tracks the rising amount of CO₂ in the upper atmosphere that is driving the heating of the earth. The recorded level for 2020 was 413.2 ppm CO₂. It is now rising on an average rate of 2.5 ppm every year. To stay within the 1.5°C warming threshold, the carbon concentration level must be kept below 430 ppm. At the present rate of increase, it will exceed 430 ppm by 2028.

Our government says Canada has no legal responsibility to counter downstream emissions as part of our national emissions, but the accounting rules are not an answer to the problem we face. The downstream emissions from our oil are a core problem. They contribute directly to climate change in Canada to the same extent as if those emissions were released in Saskatchewan or Nova Scotia. Emissions from our exported oil will contribute directly to climate breakdown in B.C. and northern Quebec. This catastrophic outcome, which crosses all national boundaries, is being driven by the physics of climate change.

• (1940)

The Chair: Thank you, Mr. Gooderham. We'll have to stop there, as we're a bit over the time.

Mr. David Gooderham: That's fine.

The Chair: There will be opportunities to speak in response to questions.

We'll go now to Dr. Exner-Pirot.

Dr. Heather Exner-Pirot (Senior Policy Analyst, Macdonald-Laurier Institute): Thank you, Chair and committee members, for the opportunity to speak to you today.

I'm speaking from the territory of the Tsuu T'ina Nation outside of Calgary.

For my remarks, I want to focus on three issues that I believe have been missing from the public debate on eliminating inefficient fossil fuel subsidies.

Not only do we have to define a "subsidy", we also have to define what we mean by "fossil fuels", because at their essence they're hydrocarbons, an incredibly accessible and versatile molecule with many uses that are critical to our modern way of life and living: textiles, rubber, digital devices, packaging, detergents, plastics, carbon fibre, medical equipment and fertilizer. In terms of the energy transition, they're also essential in the production of solar panels, wind turbine blades, batteries, thermal insulation for buildings and electric vehicle parts.

Demand for petrochemicals is booming, and the IEA expects it to account for over a third of the growth in oil demand to 2030. Invest Alberta, a Crown corporation, believes there's potential for the Alberta petrochemical industry alone to be worth \$30 billion a year by 2030. In addition to petrochemicals, ammonia and blue hydrogen are also derived from natural gas, a fossil fuel, and a consensus is emerging that ammonia and hydrogen will play a key role in the energy transition.

When used with carbon capture, this can produce very few emissions and is an excellent low-carbon energy solution. It can be produced more cheaply in Alberta than in any jurisdiction in the world, which is important, because it needs to be cost-competitive to compete with oil and gas and ensure the demand that will help achieve that critical mass of infrastructure for hydrogen. I would tell you that it is imperative that any effort to develop fossil fuel subsidies focus on activities that burn fossil fuels, rather than conflating it with the use of hydrocarbons in general.

That relates to the second point. If the intent of the commitment to eliminate fossil fuels is to reduce greenhouse gas emissions, then public support for research and projects aimed at reducing GHGs should obviously be included, even if those supports go to oil and gas companies. I note the opposition to the CCUS investment tax credit that the previous panel had discussed. Helping the highest-emitting sector in the country to reduce their emissions faster seems highly aligned with and not in contradiction to Canada's COP26 and G20 climate commitments. Punishing the oil and gas sector is not more important than reducing GHGs. We need to be fighting a climate war, not a culture war.

Finally, I would like to highlight that, despite recent COP26 commitments, the current energy crisis has spurred governments from all over the world, including Canada, to provide subsidies and tax credits for gasoline prices, heating bills and energy costs, measures that fall perfectly into definitions of inefficient fossil fuel subsidies, but they have been implemented because affordable energy is fundamental to our collective well-being and development. Almost every human development indicator is positively correlated to energy use per capita, from child mortality to literacy to gender equality.

If it's bad in Canada, you know that it's far worse in developing nations around the world, so it is not easy to paint fossil fuel subsidies with a negative brush. Some nuance needs to be applied. In many cases, this is to help the most vulnerable in our societies have some access to energy, and it is a human right. This committee should be mindful of the role we have in ensuring every Canadian has access to reliable and affordable energy.

I'll stop my remarks there, Chair.

• (1945)

The Chair: Thank you very much.

Before we go on to the questions, I would like to mention that Grand Chief Phillip was going to be with us today, but in the end was unfortunately unable to make it, so what we will do is append his opening statement to the evidence once it's translated, and obviously it will be considered for the report.

[See appendix—Remarks by Grand Chief Phillip]

We'll start with Mr. Seeback.

You have six minutes.

Mr. Kyle Seeback (Dufferin—Caledon, CPC): Thank you very much, Mr. Chair.

Dr. Exner-Pirot, I really enjoyed your comment with respect to how we need a climate war, not a culture war. Some of the things that we've heard at the committee today, that you've heard and that we've heard previously in committee are trying to say that virtually any type of tax credit that an oil and gas company is able to use is a subsidy, and therefore it's bad.

I'm wondering if you could perhaps point out that some of the tax credits that are being attacked as subsidies actually serve a pretty useful purpose in reducing greenhouse gas emissions.

Dr. Heather Exner-Pirot: The one I'm most familiar with, because I do a lot of work on indigenous economic development, is the one that Mr. Buffalo referred to: the site rehabilitation program. As he said, they are a shining success. It has reduced methane, and created jobs and economic opportunity for first nations in Alberta and Saskatchewan, as well as in Ontario. Some of the money went to cleaning up some wells in Ontario on reserve from the 1860s around "Petroleum". I believe the town is called "Petroleum" in Ontario.

Again, the idea that a tax credit going to an oil and gas company makes it bad, when it's such a huge part of economy.... The idea that you can have this transition without including the oil and gas sector, with the expertise they have in pipelines....

When pipelines aren't filled with oil and natural gas, they're going to have to be filled with hydrogen. We're still going to need pipelines, and we're still going to need to have this expertise in how you bring energy to billions of customers. Removing the fossil fuel sector from the Canadian economy is not a realistic or a desirable proposition for the climate or the economy.

Mr. Kyle Seeback: I'm going to try to give you an example, and I don't know if there's a tax credit available for this. In the example of using natural gas as a transition fuel, right now there are two steel plants in Ontario that are removing most of the coal in their operations and transitioning to natural gas. They're going to save three megatonnes each per year. That's six megatonnes. That's a huge reduction in greenhouse gas emissions.

If there were a tax credit for that, would you consider it to be one of these subsidies that we should absolutely get rid of?

Dr. Heather Exner-Pirot: The only subsidies I think we should get rid of are subsidies. We should have a much stricter definition of that.

Things that promote the burning of fossil fuels, not things that promote eliminating greenhouse gases.... I think we're missing the forest for the trees in some of the public discussion we've had and that I heard in the last panel.

• (1950)

Mr. Kyle Seeback: Thank you very much.

Mr. Gooderham, you talked about oil and gas and that we only account for 15% of emissions, and you say 85% of those are downstream tailpipe. Are you suggesting that when we calculate emissions in Canada, we should include those tailpipe emissions?

Mr. David Gooderham: That's just an accounting. You could do it, and it could be in the official numbers.

The whole point of my submission is that the fact that we don't count the downstream emissions is not a reason to not pay careful attention to the implications of our increasing oil production. For every 15 units of emissions, if you will, that we generate in Canada in the production process and might collect through the CCUS, there are 85 units that are being released somewhere else, like in Shanghai or Detroit.

Mr. Kyle Seeback: Should we not export oil? Should Canada stop all oil exports?

Mr. David Gooderham: First of all, what I'm saying is you have to weigh the downstream emissions when making the policy decisions about what Canada does with increasing production. I would say that the answer is we should stop increasing production, because those downstream emissions are going to cause immense suffering, whether we're counting them or not, so we should take them into account.

Mr. Kyle Seeback: Wouldn't that oil production be picked up from somewhere else in the world? You talk about how it's global.

Mr. David Gooderham: Yes. I—

Mr. Kyle Seeback: Canada is trying to use things like carbon capture, utilization and storage with these kinds of tax credits to lower the amount. Why would we not want to give that and say that other countries produce oil, so it's their responsibility to try to take out some of that carbon? We're not going to produce it, and hope that someone does a better job.

Mr. David Gooderham: First of all, if we eliminated, say, half of our upstream emissions, we'd be eliminating 7% of the emissions that we're putting into the atmosphere from oil production. That is negligible, given the crisis we're facing.

As to the point about carbon leakage, you're saying if we don't do it, somebody else will—

Mr. Kyle Seeback: [*Inaudible—Editor*] a carbon dome over Canada.

Mr. David Gooderham: Give me a minute.

Twenty years ago, we might have said, "Let's not do anything until we get an agreement with many other countries, so we'll all

agree to reduce our oil at the rate that is necessary to avoid a catastrophic outcome", but we didn't do that.

Now, my point in my opening was that we have nine years left to very sharply turn the curve down on global emissions. We're a big contributor to that. Saying, "We'd better not do this, because if we do it, somebody else will produce it" is essentially a suicide march. What I'm saying to you—

Mr. Kyle Seeback: No, what we're saying is that we should invest in things that are going to lower the oil and gas emissions here in Canada. The demand for oil is there. If we're not producing it, someone else will. Why don't we produce it in a way that's going to reduce the actual emissions from producing it—

Mr. David Gooderham: Because—

Mr. Kyle Seeback: —and not say that we hope someone else does?

The Chair: We're going to have to go to Mr. Duguid for six minutes.

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

Thank you to our witnesses. It's a great discussion this evening.

I would just put it on the record that in the Liberal platform, which I'm sure you memorized, Mr. Chair, on the campaign trail, there is reference in the document to EDC being refocused to be the largest clean-technology financier in Canada.

I'm fascinated with this discussion on CCUS. We have ENGOS like the Pembina Institute that are actually partnering with oil and gas to support CCUS. We have other ENGOS that are seemingly quite opposed.

My question is for you, Ms. Exner-Pirot. By the way, I'm a fellow University of Calgary graduate, and lived in that community for some years. I think in your view, CCUS is a work-in-progress and can be viewed as investing in R and D, research and development, with some promise to make industries like blue hydrogen possible. Without carbon capture and underground storage, blue hydrogen would not be possible, to my understanding.

I wonder if you would comment on the 45Q tax credit in the U.S., how it is driving CCUS, and whether it has been successful south of the border.

• (1955)

Dr. Heather Exner-Pirot: We heard in the last panel that the time has already passed for CCUS. I think that couldn't be further from the truth. But if Canada is a laggard in anything, it's in investing in carbon capture. We've already seen Norway investing in carbon capture. In fact, they're providing a straight-out subsidy paying for two-thirds of the cost of a carbon capture and utilization strategy, with industry paying only one-third of the cost, because Norway is so committed to reducing those greenhouse gas emissions.

In the United States, as you mentioned, the section 45Q tax credit was introduced back in 2008 and reformed in 2018, so they have a lot of experience with it. It has jump-started numerous CCUS projects. It now even has bipartisan support to be expanded, and we know how hard it is to get bipartisan support for anything in Washington. The major difference with the 45Q tax credit is that it also supports tax credits for enhanced oil recovery. That's obviously the most economic and, from an industry perspective, the most attractive tax credit.

If anything, I would say that Canada's and the Liberals' plan to introduce this tax credit for CCUS, although good, doesn't go far enough. If we're really concerned about the emissions, as the last MP noted, someone else is producing it if Canada isn't producing it, so let's make it as clean as possible in Canada. When you also do—

Mr. Terry Duguid: Perhaps I could squeeze in one more question, because I'm sharing my time with Ms. May.

As the price on pollution goes up to \$170 a tonne in 2030, it would make carbon capture and underground storage even more competitive. Would you agree with that statement?

Dr. Heather Exner-Pirot: Enhanced oil recovery is already competitive, because what it does....

Mr. Chair, I'm getting a bit of feedback. I don't know if it's me.

Mr. Terry Duguid: I'm not talking about for extraction purposes. I'm talking about for storing carbon.

Dr. Heather Exner-Pirot: Yes. Actually, Canada has tremendous geological potential for storage. We're blessed with so many natural resources. We're also blessed with the ability to store carbon effectively.

Mr. Terry Duguid: Thank you.

The Chair: Ms. May, you have two minutes.

Ms. Elizabeth May (Saenich—Gulf Islands, GP): Thank you so much, Mr. Chair, and thank you particularly to Terry Duguid.

My questions are for you, Mr. Gooderham. I know what you're talking about when you say that we have nine years, but I'm not sure we have a shared fact set around the table about why you say nine years. I'm just going to run through some numbers and ask you to speak to the question of opportunity costs when I finish this.

It's the IPCC October 2018 special report on 1.5°C that specifically says there's only one way that we hold to 1.5°C, and that's deep cuts this decade on the order of 50% below 2010 levels by 2030. That's a quite unforgiving number. The IPCC has said that if we fail, the window will close permanently. If we get to net zero by 2050, it will be too little, too late. We will have exceeded potentially 2°C, 3°C and so on.

My question to you is in terms of carbon budgets and the unforgiving nature of the physics of the atmosphere. If we put our money into fossil fuel subsidies, what do you see as an opportunity cost, particularly if it's a technology like carbon capture and storage, which has failed to meet its targets in countries around the world? What does it do to our chances of being able to survive on the planet into the next half of the century?

The Chair: You have about 40 seconds, Mr. Gooderham.

Mr. David Gooderham: I'll just focus on the case. Carbon capture and storage has been put forward here to allow us to continue to increase production and allow us to reduce upstream emissions. What I'm saying is that, if we're going to increase production, we are going to miss the 2050 target. There's no doubt about that.

We're a major supplier and, if other countries do it as well, we're going to miss it. I pointed out that the current carbon concentration level is 4.13. It's going up 2.5 a year, and once we clear 4.28, there goes 4.30. We've passed the 1.5 limit, and when we cross 4.50, we pass the two-degree limit, and that will happen by 2035 at the rate we're going.

We're just talking around this issue, but this is, in fact, the thing that's going to kill us.

The Chair: Thank you.

Madame Vignola, you have the floor.

[*Translation*]

Mrs. Julie Vignola: Thank you very much, Mr. Chair.

Ms. Exner-Pirot, I'd like to ask you quickly if it's possible for you to send the clerk the data, the information, and the sources of information in relation to all the answers you gave to Mr. Duguid's questions a few moments ago.

Mr. Gooderham, I would like to give you a minute to complete the idea that you talked about with my colleague Mr. Seeback. Then I will ask my questions.

• (2000)

[*English*]

Mr. David Gooderham: The point I was seeking to make is that I understand the carbon leakage argument. I've been following it, like all of you have, for the past 12 or 15 years.

We've never managed to negotiate any agreement with other countries to stop increasing. In fact, we massively increased our production, and now we have, in effect, nine years left to achieve a 50% reduction. There is no argument about that; that is the science. We're not going to be able to do that if we continue increasing oil. It's absolutely clear we won't; therefore, at this moment, to say, "Well, if we stop producing more oil, other countries will just keep producing it" cannot be a sufficient answer because it is suicidal. Therefore, we stop increasing our production, and we start trying to get other countries like Norway and England to agree to do that, and we then move to tariffs and other systems to block out oil from countries that are continuing to increase. We either do that or we are killing our children.

[Translation]

Mrs. Julie Vignola: Thank you very much, Mr. Gooderham. I understand that we need to be a role model and set a good example in reducing emissions.

My next question is this. The Canada Energy Regulator published its scenarios in December 2021, in the report entitled “Canada's Energy Future 2021”. In addition, the board presents scenarios that forecast a 19% increase in oil sector production until 2032, followed by an equivalent decline between 2032 and 2050. An equivalent decline means a 22.6% decline.

Six months earlier, more than 20 specialized economists and climate experts asked the Prime Minister to ensure that the regulator incorporated the recommendations of the International Energy Agency report into its scenarios. We are still waiting for these scenarios.

That said, I am concerned about a possible conflict of interest, as the regulator is modelling a future that in no way reflects Canada's international commitments. What do you think is going on?

I'd like to hear from you on that, for about two minutes.

[English]

Mr. David Gooderham: The report on December 24 of the Canadian Energy Regulator, as it's now called, was decisive because it embraced, for example, this great commitment to net zero and relying on carbon capture and storage. It is a lengthy report that we all read. It put forward something called the evolving scenario. You'll be familiar with that. It was an alternate, slightly lower level of oil production for Canada, but still a substantial increase.

It then observed explicitly in its report that even that scenario would not get us to net zero. It would not keep us within 1.5 degrees and it did not go on to tell us what kind of trajectory for oil production for Canada would do that.

That was in November 2020. In July 2021, about 24 of Canada's leading energy economists and experts on climate called on the CER to develop a scenario that would align itself with the IEA's net-zero scenario for oil production. It would be a line going down like that to some degree. Again, the CER issued a report on December 9 of this past year that again didn't tell us what that scenario might be.

The minister finally, on about December 21, directed, if you will, the CER to proceed and do that modelling, but we still don't have it.

I put this to the committee, since you're calling the government to account in Parliament. How can the government be setting these major plans, like increasing oil production, but at the same time doing massive carbon capture and storage, without us knowing what kind of trajectory for our oil production would be consistent with staying within 1.5 degrees?

We just don't know.

• (2005)

[Translation]

Mrs. Julie Vignola: Why are they doing this? Why don't they get out of the oil business and think about viable and responsible

long-term solutions for future generations? What is holding them back?

[English]

Mr. David Gooderham: I can't answer that better than you can.

The NEB, which was the same organization, did the inquiry into the TMX pipeline in 2016. That was, essentially, the key pipeline project that would commit us to this growth we're now seeing in oil production.

There was an opportunity in 2016 to have the NEB examine whether the projected increase in Canada's oil supply could be consistent with the 1.5 degrees target. The Liberal government at the time could have directed the NEB to do that, but they didn't do that.

The Chair: Thank you.

We'll go to Ms. Collins, who may invite you to continue your line of thinking, but that's her decision.

Ms. Laurel Collins: I do have some questions for you.

The Liberal government is spending nearly two and a half times the amount on Trans Mountain pipeline as it is on its climate plan that it just unveiled this week.

The government continues to kick the can down the road, subsidizing unproven carbon capture technology instead of investing in renewables. We heard a report that the government has subsidized fossil fuels at 14 times that of renewable energy projects.

Would you agree that subsidies targeted to reduce emissions in the fossil fuel industry would be better directed to help fund the renewable energy transition?

Can you give a frank assessment of what this government has done over the past six years and the direction it is headed now?

Mr. David Gooderham: I certainly think the subsidies should be withdrawn from the industry. Concurrently with that, the applicable carbon price under the output-based system should be substantially increased. Then we will begin to see a decline in our production. We have the tools to do it.

The Supreme Court of Canada has said that the federal government has that power. There is no reason why the performance standard is set at such an absurdly high level that they pay a carbon price on a fraction of their emissions. That's just the upstream emissions.

We have the tools. Remove the subsidies, save for helping with transition of communities, and accept that this industry now has to go into a declining trajectory, however gentle that may be.

That's my answer to your question. Remove the subsidies.

Ms. Laurel Collins: Thank you so much.

Just to follow up on that, Canada's biggest emitters are paying the lowest carbon tax rate, about 1/14 of the full carbon price. Maybe just a quick yes or no: Would you consider that a fossil fuel subsidy?

Mr. David Gooderham: Definitely, it's a subsidy by any measure.

Ms. Laurel Collins: What policies and funding measures would help accelerate the development of clean renewable energy initiatives?

Mr. David Gooderham: Well, that's really beyond... I don't have an expertise in that, but what I do know from having watched this for the past 10 or 15 years is that we have, and in particular in Alberta, the wind and solar opportunity to have the biggest clean energy industry in North America. I think that the incumbent industries have got a stranglehold on the policy process.

To illustrate that, I will point out that, when the CCUS thing emerged about 12 months ago, it didn't emerge in a government policy statement; it emerged in the pages of *The Financial Times*, *Bloomberg* and the financial sections of newspapers reporting on interviews that their CEOs were giving. Then our government responds through other newspaper interviews and says, "Oh, we'll sit down and talk to them about a \$75-billion subsidy program".

There's still not a government document that makes the case for carbon capture and storage either on the emissions basis or any other. It's all coming from the industry.

Ms. Laurel Collins: Thank you so much.

In 2020, Export Development Canada provided \$5 billion in loan renewals for financing for the construction of Trans Mountain pipeline.

Do you think that amendments to the Export Development Act need to be made? If so, do you have a sense of what they would be and how they would be consistent with the United Nations Declaration on the Rights of Indigenous Peoples?

• (2010)

Mr. David Gooderham: On the rights of the indigenous people, I might say that the big thing that's impacting the rights of indigenous people is the TMX pipeline itself. We've heard many crocodile tears on this about not consulting with aboriginal groups and about taking away opportunities to develop the oil industry, but the brazen lack of consultation on the TMX pipeline was a major error.

I think that pipeline should have ceased when it was no longer commercially viable. That was clear back in 2018. It's now clear. If we look at the CER's own evolving scenarios now for oil production, they themselves admit that, after 2032, when our peak production arises, that pipeline, TMX, will be surplus capacity.

Ms. Laurel Collins: Thank you so much.

You mentioned that the IPCC has put a target of a 50% global reduction needed to reduce our emissions in order to ensure a livable

planet. Can you comment on the adequacy or inadequacy of the government's current target?

Mr. David Gooderham: As for the target, I read the report two days ago, and it looks like they've got a target of a 40% reduction—pretty sketchy.... It hasn't advanced much since the December 11, 2020 numbers, which were very similar.

They're still promising, in the case of the oil and gas sector, an incredible 80-million tonne reduction of emissions by 2030 below the current level. That simply cannot be accounted for. There's no way carbon capture and storage on that level is going to be in operation by 2030; it's a fantasy.

The Chair: Thank you.

I hate to stop you there, Mr. Gooderham.

We now go to the second round, a five-minute round, and Mr. McLean will kick it off.

Mr. Greg McLean: Thank you very much.

Madame Exner-Pirot, I'd really like to hear more about the comparability of the 45Q regime in the U.S. versus what we are proposing here in Canada, either enhanced oil recovery or not. Can you tell us if the 45Q includes enhanced oil recovery in the United States?

Dr. Heather Exner-Pirot: This isn't my area of expertise. Energy security and global energy demand is, as is indigenous resource development. I can tell you that, yes, it includes enhanced oil recovery, and I assume you know that there are very good environmental reasons in terms of land impact to do enhanced oil recovery.

Mr. Greg McLean: Thank you.

Can you elaborate further on the flow of funds for research and development and the technology jobs associated with this that have migrated from Canada to the United States since 2018 when they came up with the 45Q regime to develop technologies to enhance the carbon capture technology they use now in the United States?

Dr. Heather Exner-Pirot: I wouldn't have the specifics. You probably have the specifics in front of you. But as you're very familiar with, there has been outflow of foreign direct investment out of Canada for oil and gas, for mining that we need for critical minerals, for everything because of our very long and arduous regulatory system. We need all those things to make renewables also, so we need to reconsider all the things that we do to attract foreign direct investment here.

Mr. Greg McLean: Are you familiar with the amount of funds, government and corporate, that have been invested in developing this technology over the last decade in western Canada?

Dr. Heather Exner-Pirot: No, I'm not but I'd love to hear it.

Mr. Greg McLean: It is billions of dollars, as we've said, and it is public funds from the Government of Canada, the Government of Alberta and the Government of Saskatchewan, and it does capture significant carbon. These are some of the best carbon capture technologies around the world. We do represent a large portion of carbon capture sinks in the world in Canada as a result of commitment from both public sector and private sector organizations in Canada, so thank you for the opportunity to ask that.

As far as the economic viability of the sector goes, if we continue to give more economic benefit to a neighbouring jurisdiction, the United States, because they're giving better economic programs to make sure that producing companies can continue to produce and provide an energy benefit to their citizens while at the same time developing technology that captures carbon and provides other environmental benefits to the world, do you think those companies will migrate elsewhere?

I'm sorry, that was a long-winded question.

• (2015)

Dr. Heather Exner-Pirot: We've already seen it, and I think the key of this question is that Canada doesn't operate in a bubble and the oil and gas industry doesn't operate in a bubble. If we think it's a fantasy that we're not going to have carbon capture in nine years, let me tell you about the fantasy of reducing global demand for oil and gas in the next nine years.

Are we better off? Do we believe that Canada has better ESG performance than Russia, than Iran, than Venezuela and indeed than the United States? By objective measures, we do. The question is do we want to have some control over how that gets produced and how it gets exported, not only on the environmental side, which shouldn't be the government's only consideration, but obviously on the social and governance side, which we've seen become such an issue in the last two months.

Mr. Greg McLean: Okay.

Dr. Heather Exner-Pirot: Absolutely we should be encouraging investment in Canada.

Mr. Greg McLean: I have another question.

I was over at the International Energy Agency meetings last week and Australia made it very clear that in the last decade, OECD countries, the most developed countries in the world, have decreased their share of fossil fuels as a percentage of their energy mix from 79% to 77.9%, so a reduction of 1.1% of their energy production from fossil fuels over a decade.

As Australia would say to that point, it is time to actually look at how we decarbonize this sector as efficiently as possible and as quickly as possible as opposed to continuing to tilt towards other infeasible solutions at this point in time.

Do you have any comment there, Ms. Exner-Pirot?

Dr. Heather Exner-Pirot: Absolutely. It's even worse than that because we're having an energy crisis right now. People have not had the natural gas, the LNG, that they would have used instead and actually coal production is reaching record historical highs and emissions this year are reaching record highs.

The unintended consequences of saying that LNG is not a perfect solution so we can't use it at all, not only produced more, not only have fertilizer prices been at the highest they've been in history and creating food insecurity and famine, but also caused coal production to go up and emissions to go up and set us back in that respect by several years.

Mr. Greg McLean: Thank you.

The Chair: Mr. Longfield.

Mr. Lloyd Longfield (Guelph, Lib.): Thank you, Mr. Chair.

Thank you to the witnesses for, as the chair has said, a good debate that we're having within committee.

The clerk is keeping notes and I'm sure we'll be able to sort this out at the report stage, but some of the numbers like \$9 billion that we've just topped up, which was in addition to \$100 billion that we'd previously spent, I think are fairly misleading this evening.

I want to go back to some of the basics with Dr. Exner-Pirot on market dynamics that create the need for subsidies. When markets are early in their development, the only way to scale and to get through the valley of death is through some external force or funding, quite often from federal governments and that's done around the world.

Could you maybe discuss the dynamics that we're in right now in terms of the transition to a cleaner version of what we're doing? Also, can you discuss when we might remove the need for subsidies, as we're saying right now that inefficient subsidies are to be removed by 2023? The price of oil is increasing again. The market should be able to handle some of its own investments. Could you comment on that?

Dr. Heather Exner-Pirot: I can. I favour small government, so when the oil and gas industry is making record-breaking profits, I think that they should be paying for a lot of the things themselves. There's no reason for the taxpayer to subsidize that. However, on things like carbon capture, where it is a new untested technology, where there are large upfront costs, competitors in the oil and gas world elsewhere aren't doing carbon capture and aren't reducing the methane in the way we are. When you're asking the Canadian oil and gas industry to do something at a higher standard and at a more expensive level, which makes their production more expensive and thus less competitive, that's when I think there's a role for the public sector to step in.

Mr. Lloyd Longfield: Terrific. I can think of some parallel situations in mining when we were fighting the ozone layer. Nobody could afford the scrubbers that went onto the stacks. The global market had to come to some kind of conclusion on that, but in the meantime, we had to put some money into those solutions. The result was that we solved the ozone layer crisis back in the eighties.

Dr. Heather Exner-Pirot: Absolutely, and for things like electric vehicles, yes, it makes sense to subsidize chargers at this point. We can all agree with that. It has to make sense on the greenhouse gas emissions efforts also.

• (2020)

Mr. Lloyd Longfield: Thank you. I was listening to Mr. Carrie's questions and also thinking that in Ontario, the automotive industry has had subsidies to get us into the position where all of the major manufacturers are now going to EVs or going to zero emissions vehicle production. That would not have happened with the market forces alone, given the low demand for those units, and now we're in a position to lead in that market. There's a parallel in Alberta.

Dr. Heather Exner-Pirot: Yes, and I will say that a lot of what they have described as subsidies was basically getting the oil and gas industry through that rough six months in 2020 when oil and gas prices did go negative. That helped them stay afloat in that short period, and now, obviously, they've been able to pay back those loans. Those aren't the cheapest loans. They would be the first ones they would have wanted to get off their balance sheets, but there was a good role of government in providing those loan guarantees in that exceptional black swan period.

Mr. Lloyd Longfield: Right, and the commercial results will come. Then some of those loans will be repaid, some of them with different terms, which could then be determined to be an inefficient subsidy. We need an international definition of "subsidy" because we are in a global market, so it's important for Canada to work with Argentina to try to come up with some type of definition that all global producers can agree on.

Dr. Heather Exner-Pirot: Absolutely, and again, I just have to warn you that it should focus on the consumption of fossil fuels for burning it, for enhancing greenhouse gas emissions, not for using the magical molecule of hydrocarbon in so many other ways that positively impact our lives.

Mr. Lloyd Longfield: Great, thank you.

On the complexity of this, we're also working on a cap. What is the cap going to look like? I know that the government is in discussions federally. We're working with the provinces and with the people who are involved with setting carbon pricing in the different provinces and territories to get to a cap on this. What's your view on caps?

Dr. Heather Exner-Pirot: In the G7, they just announced last week—Prime Minister Trudeau—that we call on oil- and gas-producing countries to act in a responsible manner and to increase deliveries to international markets. We can't have a cap on emissions without resulting in a cap on production, and guess what? The new development is that this cap would be imposed on LNG and blue hydrogen because the oil sands are already producing, so from an environmental perspective it makes no sense.

The Chair: Okay, thanks.

I'll go to Madam Vignola.

[*Translation*]

Mrs. Julie Vignola: Thank you very much, Mr. Chair.

Ms. Exner-Pirot, I would like you to send the clerk the sources of information regarding the performance that you discussed a few moments ago with my esteemed colleague Mr. Duguid.

Mr. Gooderham, the appetite for carbon capture has grown by leaps and bounds over the last few years. Strangely, the most ardent proponents are those in the oil and gas sector, who are greedy, thirsty, for public funds.

From the beginning of the evening, we've been hearing the same thing about the effectiveness of CCUS, the program in relation to carbon capture, use and storage.

Can you put a figure on the failure of carbon capture, use and storage measures? If you do not have time to answer the question, I would ask you to send a further response to the clerk.

Thank you.

[*English*]

Mr. David Gooderham: Yes, I would be happy to do that. I have filed a submission with you, but on that question, I will supplement it.

I will note, however, that we mustn't overlook that in Alberta between 2008 and 2014 there was an immense program to develop carbon capture, and the plan was—according to the published plan—to reduce emissions by 139 million tonnes by 2050, using carbon capture. The program was abandoned in 2014 because the Alberta government of the day said that it was a science experiment and uneconomical, and the NDP government agreed. So that was the end of it.

We have in Alberta the only survivors of that immense program, the Quest project and one other. Quest captures 1.5 million tonnes. The government recently boasted that it captured four million tonnes between the time it was completed in 2015 and 2019, four million tonnes. In that time, the cumulative emissions, upstream emissions in the oil sands, were 300 million tonnes, so it captured a little over 1%.

So the statement that we have a lot of carbon capture in Canada, with respect, is unfounded. We have the Boundary Dam and as far as the build-out of this goes, anybody who is seriously informed on this might suggest that by 2030 we're going to be capturing maybe 20 million tonnes in Alberta at most.

• (2025)

The Chair: Thank you.

We'll go now to Ms. Collins.

Ms. Laurel Collins: I have a follow-up question to that one.

You said that the objective of carbon capture and storage is to facilitate the continued expansion of oil production and to maintain high production levels through 2050. The government's recently tabled plan forecasts a 22% increase in production over the next eight years. They've also recently announced an increase in production of 300,000 barrels a day.

You've also pointed out that such a level of production is incompatible with keeping to 1.5 degrees and avoiding catastrophic climate change. We heard from a previous witness that carbon capture technologies have so far captured only a fraction of a per cent of Canada's GHG emissions and that's despite the billions of dollars in subsidies. You mentioned Alberta's example.

Can you speak a little bit more about the current carbon capture technology and the government's reliance on this?

Mr. David Gooderham: Well, it actually has very little. Several major projects were cancelled in the States—coal sites—a couple of years ago because they were simply uneconomical. There are, of course, long-standing projects in Algeria and one in the North Sea done by Norway, but the IEA, back in 2013, was expressing its disappointment that carbon capture and storage had not been picked up around the world. It still hasn't, and the reason is the cost.

Alberta had a huge investigation or study in 2015. It was published in May 2015 by the Council of Canadian Academies. It involved about 15 engineers who knew the oil sands, and their conclusion in 2015 was that carbon capture would never play a significant role in reducing emissions in the oil sands. Why? Because it's too expensive.

Then they went on and explained in more detail. Part of the problem is that you can build a new project, a greenfield project, that would possibly have some economics to it, but to renovate old projects is a major expense and that is what most of the production in Alberta is. The other problem was that for in situ production—which is now the typical production in Alberta—the economics of scale are too small to justify carbon capture in situ.

The Chair: Thank you. We'll go now to Mr. Dreeshen for five minutes.

Mr. Earl Dreeshen: Thank you very much. It's been an interesting evening.

I'm so thankful, Dr. Exner-Pirot, that you talked about hydrocarbons. Everyone talks about fossil fuels as though they understand what that's all about. The reality is that what is coming out of the ground is something that is used in so many different areas. It is for the plastics and fertilizers that we have, and all of these types of things. Any products that we see around these tables are part of that.

I was speaking with the head of Dow Chemical in Red Deer not that long ago. I mentioned this before. He was pointing out that in a windmill there are 17 tonnes of material of which seven tonnes are plastic. To think that you can just shut off the main feedstock that we have, and that it's going to allow us to come up with these magical ideas, I really find it difficult to sort my way through that.

If we take a look at uranium, which of course is an energy source, and all of the rare earth minerals that are going to be re-

quired for batteries, and come up with some magical new product to replace the 40% of plastics that I said are in windmills...If that happens to be found on your land, or indigenous property, or the people around here in their own riding...I'm wondering if we could trust this government to give us the licence to develop corridors to transport and access markets.... Or will these new products be met with the same scorn as we see with oil and gas?

What do you think the future would be for any kind of development in Canada?

Dr. Heather Exner-Pirot: We absolutely need a low-carbon transition. That carbon transition will change from the exploitation of fossil fuels to the exploitation of minerals. That is so well known.

Critical minerals are required for transmission lines, EV batteries, generators, magnets and everything that goes into making the sun into actual electricity that we can dispatch to a consumer. With some of the minerals, like lithium, we need 10 or 12 times the mining that we're doing right now. For others, like copper, it's three or four times. Overall, our projection of minerals in the world...We can't have a transition until those mines get built. That takes 10 to 15 years. They're at an affordable rate, so we can start buying them.

We have to make mining more affordable. We have to get more product to market. We have to enhance our supply chains. Guess what? The fact we're in an energy crisis, and oil and gas costs more, means that everything in that mineral supply chain is also going to be more expensive. For the first time after a decade we're seeing solar panels costing more, and electric vehicle batteries costing more. The price of a Tesla is a third more than it was a year ago.

• (2030)

Mr. Earl Dreeshen: Of course, when we talk about windmills, solar panels, or any of the other types of renewable projects that might come on stream, the question then becomes, are we going to demonize those people who are shareholders in a similar way as we are demonizing the oil and gas companies?

We'll eventually say, "Well, these guys are making way too much money, so we should be taxing them, as well." You start doing that, and they're going to either go to other countries and leave us in a lurch, or they'll start bringing in products from other places in order to keep the costs down.

When can we ever expect some sanity to return to this discussion?

Ms. Laurel Collins: Point of order, Mr. Chair.

The Chair: Let me just stop the watch.

Ms. Laurel Collins: I'm sorry to interrupt my colleague. It is 8:30 p.m., and I'm curious at what time we're planning on ending this.

The Chair: We have one more questioner, Ms. Taylor Roy, and then we're done.

Go ahead. Dr. Exner-Pirot.

Dr. Heather Exner-Pirot: In terms of energy security right now, China controls a quarter of our mining production. Russia controls another 9%. We absolutely need to ramp up a critical mineral supply chain with our allies. They're going to look to Canada to provide those minerals for this renewable energy transition.

We absolutely want to incentivize, make it easy, and make it quick to get mines up and running in Canada. It is imperative to have a slow carbon transition in a safe way that doesn't change Russia's geopolitical leverage over to China.

The Chair: Last, but not least, we'll go to Ms. Taylor-Roy.

Ms. Leah Taylor Roy: Thank you. I'd like to share my time with Elizabeth May.

The Chair: Ms. May.

Ms. Leah Taylor Roy: She may have left.

Okay, then, I will proceed. I thought she was there.

Mr. Gooderham, I've been listening to the debate, and clearly there are two very different sides to this story.

With regard to what you've been telling us about nine years and the need for a quick transition, I look back to the story of CCUS that was under way 10 or 15 years ago in Alberta, and a lot of the other initiatives that have been taken. What do you think it's going to take to get us to move more quickly in the direction we need to go, because we've been talking about it for a long time?

I understand what Ms. Exner-Pirot was saying about the need to do this in a methodical way, and I don't disagree, but it seems to me that we're running out of time.

How would you respond to that, Mr. Gooderham?

Mr. David Gooderham: That's the great vexing question. It's the heart of our extraordinary dilemma that we're in.

I might say that nobody is saying to shut down all oil in the next year, but we're talking about 25% in terms of global production down by 2030.

I can only say that I think until people can, if you will, pause and move away from the debates of whether this is a subsidy or that a subsidy, and this industry and all that, and recognize the fundamental constraint facing us....

I am going to put it to you in this way: For the children who are now five years old and six years old—and we all know some of them—by the time they're in grade 8, it's going to be too late for them to reverse this path that we're on. That's how bad it is. I put it in that way, because I think that conveys the absolute desperation of where we are now. We're here in this situation because we didn't act 10 or 15 years ago.

I cannot think of a better way to answer your question.

• (2035)

Ms. Leah Taylor Roy: Thank you very much.

Ms. Exner-Pirot, what is your response to that?

Dr. Heather Exner-Pirot: For many people in the developing world, that terrible future is today, because of inflation, high energy costs, high food prices. In fact, according to the FAO, the food price index is as high—

Ms. Leah Taylor Roy: I'm sorry. I have only one minute, Ms. Exner-Pirot.

I understand cost-of-living considerations, but people in the developing—

Dr. Heather Exner-Pirot: It's the famine. There is famine now because of fertilizer prices, because of the energy crisis, so we need to consider the—

Ms. Leah Taylor Roy: Right. It's also because of the drought and because of extreme climate crisis. Some of the developing countries are actually the ones that are suffering most from climate change, although they haven't contributed to it.

I am asking about climate change in particular.

Dr. Heather Exner-Pirot: All of these issues are tied up together. I agree that climate is a very important issue and I agree that the energy crisis is a very important issue. I don't think we should ignore one at the expense of the other.

Ms. Leah Taylor Roy: Okay. Thank you very much.

Elizabeth, do you want to ask another question? I am offering to share my time with you.

Ms. Elizabeth May: Thank you so much. I foolishly took off my headset because I didn't think I'd get another chance.

If you're willing, I want to get back to the questions I was pursuing earlier with Mr. Gooderham about timelines and urgency.

If we had all the time in the world, we could look at lots of different options, but the unforgiving thing is the timeline to 2030. I'd like some final thoughts from Mr. Gooderham on that, if we could.

Mr. David Gooderham: I did send you a submission that has a section in it about the rising atmospheric carbon concentration level. We can talk about this in terms of carbon budgets and other ways, but the most immediate way to look at it is what that atmospheric level is at, because that is what is driving the heating. That's well understood and well documented, yet never discussed in any of the Canadian government's reports.

As I said, it was 413 in 2020. It used to be going up at about 0.03 a year back in the 1990s. It's now going up at 2.5 a year. We know that by 2028, it's going to be above 430. At 430, the atmospheric carbon concentration level is the line at which, unless we have amazing technologies to remove carbon from the atmosphere later, we will irrevocably have risen above the 1.5 line.

Ms. Elizabeth May: Do you mind if I put in another reference point that for the last, roughly, million years it was never above 280 parts per million?

Mr. David Gooderham: Yes.

Ms. Elizabeth May: Therefore, going above 413 this year and being at a 1.1 degree global average temperature increase already should make us rather more motivated.

The Chair: That brings our meeting to its conclusion.

It was a fascinating discussion in both panels, with very vigorous and well-articulated points of view that help us define and clarify the issues we are studying.

Thank you very much to both witnesses for your articulate presentations and answers.

On that, I will adjourn the meeting. We'll see each other next Tuesday at the usual time of 11 a.m.

Thank you.

Speaking Notes for GCSP: House of Commons Standing Committee on Environment and Sustainability

March 31, 2022: 7:00 – 8:30 PM EST

- I'm pleased to be invited to speak with the committee about the future of federal subsidies for the fossil fuel sector.
- With the passage of federal UNDRIP legislation, the Committee absolutely needs to hear directly from the Indigenous Peoples on whose lands the sector's activities are taking place.
- The *Implementing UNDRIP Act* recognizes the right of Nations to participate in the governance of their own territories and resources;
 - deciding how the federal government should subsidize the activities of the fossil fuel sector has direct implications on the needs and interests of those Nations, and the committee should make every attempt to include them in these proceedings.
- Representatives from the industry have certainly been given plenty of opportunity to make their concerns known here.
- We should remember that the fossil fuel industry has spent decades promoting misinformation about the safety of their activities and products, and delaying any meaningful government action that would have the effect of reducing their profits.

- So today we've reached a point where we have international consensus that every country, and especially the major oil-producing countries, need to make significant reductions in emissions very quickly.
- The obvious and most effective way to reduce emissions this decade is to reduce our production and use of fossil fuels, in part by eliminating public financial support of the sector as soon as possible.
- But the G20 has only committed to eliminate incredibly vague categories of subsidies: "inefficient" subsidies for "unabated" fossil fuels.
 - That leaves an incredible amount of wiggle room for the industry to continue fueling the climate crisis and delaying real emissions reductions.
- There's absolutely no reason to believe the industry's claims that they can increase production of oil and gas in Canada and pull emissions reductions out of a hat later, if only they had enough handouts to develop the technology to do so.
- The fossil fuel industry is one of the most influential groups in world history; they can certainly afford to make their emissions compliant with federal regulations without government handouts.
- If a few executives end up taking home a few million less every year so that their companies can afford to comply with the targets, then so be it.

- If smaller companies can't afford to operate in this sector under the emissions targets that we desperately need, then the federal government needs to give their workers a lifeboat to other industries to put their skills to work on a just transition.
- Enough is enough. The continued support for fossil fuels in any major economy is inexcusable.
- Hundreds of Canadians were cooked to death in their own homes last year, and we're seeing communities getting wiped off the map. We're in a crisis that is going to continue getting worse for decades even if we stopped the pumps tonight.
- It's not clear whether the government that's been in power for the last seven years has completely failed to understand the moral weight of their continued financing of this industry or if they just don't care.
- The Liberals have already given the oilpatch a pass on serious commitments in their latest *Emissions Reduction Plan* – they shouldn't give the industry a dollar more.

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