HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

44th PARLIAMENT, 1st SESSION

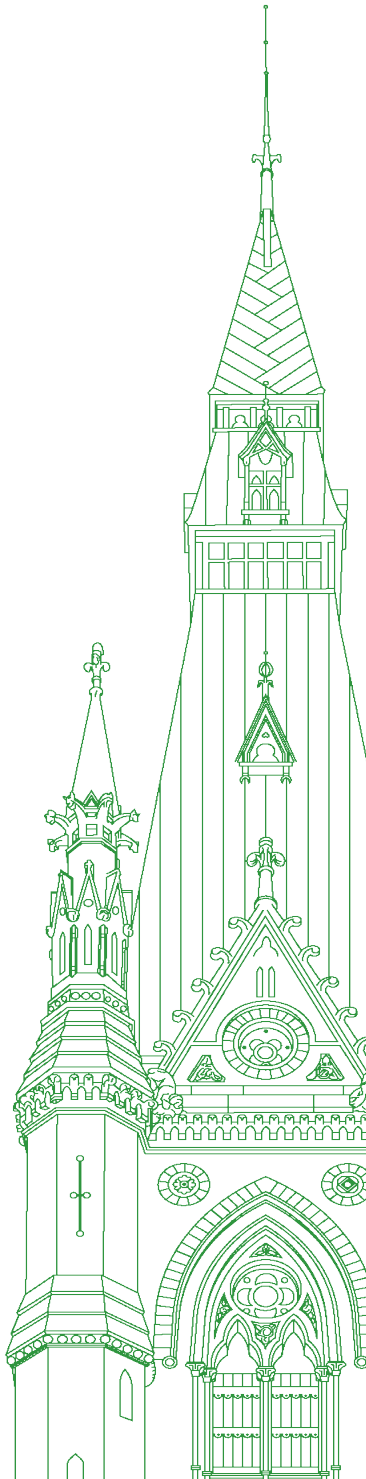
Standing Committee on Natural Resources

EVIDENCE

NUMBER 071

PUBLIC PART ONLY - PARTIE PUBLIQUE SEULEMENT

Monday, September 18, 2023



Chair: Mr. John Aldag

Standing Committee on Natural Resources

Monday, September 18, 2023

● (1100)

[*English*]

The Chair (Mr. John Aldag (Cloverdale—Langley City, Lib.)): Good morning, everyone. I'd like to call this meeting to order.

Welcome to meeting number 71 of the House of Commons Standing Committee on Natural Resources. Pursuant to Standing Order 108(2) and the motion adopted on November 29, 2022, we are commencing the committee's study on Canada's clean energy plans in the context of the North American energy transformation.

We have a number of departmental officials today to kick us off.

I'd like to welcome you. We'll get into the introductions shortly.

I'd also like to welcome all of the members, staff and the team, including our new clerk, Patrick, and Stephanie, who's going to be supporting us through the transition.

Welcome to our analysts and everybody else who makes this possible, including our interpreters and all of their support. I hope everybody had a great summer.

Before we get started, Mr. Angus, you've motioned something, so I'll turn the floor over to you briefly and then we'll get into our meeting.

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

I'm extremely pleased to be back and to see all of my colleagues here. I hope all of you had a safe summer. We certainly were affected by the burning in the Far North and the communities that were forced into evacuation. We saw fires right across North America and children who couldn't go out to play. Coming into Ottawa in the summer was a scene out of a nightmare. I raise this because I think it's really important that we get our committee focused on this.

To that end, Mr. Chair, I have brought forward a motion asking Mr. Kruger, the CEO of Suncor, to come to testify. I was very surprised by his comment that the urgent issue for Suncor was to make as much money as possible. This is a company that's made $70 billion in profits in two years. We've seen that these companies are putting the brakes on transition spending with no new investment in reducing emissions, yet they are regularly coming to Ottawa to look for us, the Canadian taxpayer, to give them money to deal with these costs.

I have the motion. We can debate it now or I could debate it at the end, but I think it's really important that we invite Mr. Kruger to come forward to explain whether or not Suncor is going to be a good corporate citizen at a time when we need all hands on deck to deal with the urgency of a burning planet.

The Chair: Your motion was put on notice in advance. We do have our departmental officials here, and I would like to get to them sooner rather than later.

Is there any discussion on the motion?

Ms. Dabrusin, I'll go to you first.

Ms. Julie Dabrusin (Toronto—Danforth, Lib.): First, I would like to say that I support Mr. Angus's motion.

I think it would actually be good to hear from the CEOs of all of those related companies on this point he raised. I think he is absolutely correct. We have seen a summer of wildfires, and it's important that the oil and gas sector, which is our largest emitting sector in the country, comes to talk to us about what meaningful action they're taking to decarbonize and to reach net zero by 2050.

I support the motion.

The Chair: Thank you.

Mrs. Stubbs is next.

Mrs. Shannon Stubbs (Lakeland, CPC): Thanks, Chair. It's nice to be back with all of you.

Thanks, Charlie, for your motion. I wonder if we could have a discussion, either now or later, on where you see this fitting in, because I think we have an agreement to do the electricity interties study after the seven meetings on this IRA study.

In general, we support the concept of Canadian energy company executives coming to committee to inform members of this committee, who sometimes seem woefully uninformed, about the scope and scale of innovation investments in technology; of the ways that energy companies—particularly Suncor—have been driving the development of renewable and alternative energies, as well as the fuels of the future, for decades; and, certainly in Alberta's case, of a province with the oldest and largest commercialized solar and wind farms to the point that now they're going through decommissioning as a result of major private sector investments from companies like Suncor and other energy companies in the country.

It's totally reasonable to have energy executives come here to tell this committee, as well as all Canadians, about the major impacts they make with private sector dollars, which is actually the Conservative priority of technology over taxes to achieve emissions reductions globally.

We support the concept of energy executives coming here, but I just wonder how this would fit in schedule-wise.

● (1105)

The Chair: Thanks.

Just before I go to Mr. Angus and then to Monsieur Simard, I booked about 20 minutes at the end of the meeting today for committee business. If we feel that there's going to be a bit more time....

We'll see where the discussion goes with our officials and how quickly we can get into starting the meeting, but we do have time at the end of the meeting to discuss the fall work plan and any adjustments. I heard from Ms. Dabrusin perhaps an amendment or some sort of massaging of the new motion put forward by Mr. Angus, and we'll have to look at timing.

We can continue that now, or we can hear from the last two speakers that I have currently on my list, get into the discussion and then come back to this at the end of the meeting, if that's okay with our members.

We'll go to Mr. Angus and then to Monsieur Simard.

Mr. Charlie Angus: Thank you.

It seems like we have interest in this. I don't want to belabour the point. I don't think this needs a big study, like some of the other studies we're doing.

I think we could have a meeting where Mr. Kruger and Suncor come to explain why they've walked away from the transition funding and what they see as urgent in terms of the urgency that Canadians are feeling.

I'm ready to vote on it. I think we could have a meeting. If people wanted to have more executives, we could have more than one meeting, but we have a busy schedule and I don't want to belabour the point. I'm ready to vote.

The Chair: We have Monsieur Simard and then Mr. Dreeshen.

[*Translation*]

Mr. Mario Simard (Jonquière, BQ): Mr. Chair, I was going to suggest that we settle this in subcommittee, where we could consult the analysts in order to agree on a date. It would be the easiest way to do it.

I fully agree with Mr. Angus' motion. We just need to know how to implement it quickly and, at the same time, ask our analysts to provide us with a little more information on the impact of the oil and gas sector, and give them time to prepare documentation so that we have a little more of a complete picture.

We shouldn't rush if we want to have interesting and well-prepared meetings, which is why it's important to wait and discuss it in subcommittee in order to better plan our work.

[*English*]

The Chair: Thank you.

Go ahead, Mr. Dreeshen.

Mr. Earl Dreeshen (Red Deer—Mountain View, CPC): Welcome, everyone.

I wasn't really going to say anything until Charlie said, “I'm prepared to vote on this right now.” I felt it was important to also put a few more points on the table in case we don't do what Mario suggested, which is to go and deal with this later today. I'm not in agreement with voting on this right away, but I really think it's important.

The main discussion started off with the wildfires here in Canada and so on. It happens to be the fewest forest fires they've had in the U.S. in generations right now, but in Canada, yes, we have a problem. The problem isn't because of the carbon tax or the decision of Suncor. These are forestry issues that should have been dealt with many years prior. Having them come to explain that, I think, is important. I just want to make sure that everyone recognizes that, when we comment, it is not simply because, looking at the global situation as far as energy is concerned and the disastrous policies that have affected Europe, Australia and other places around the world, all of a sudden, we want to go and poke a finger at one of Canada's larger employers. That is my position on that.

Again, if we are going to discuss this in public, perhaps we will need to have some more time today. If we want to wait for the vote, I'm happy to do that.

Thank you.

The Chair: Thanks.

Go ahead, Mr. Angus.

Mr. Charlie Angus: Thank you.

I certainly think we've heard everyone's position. I'm interested in talking with Mr. Simard later about how we get more information. I think we have consensus to vote on this. If we can vote on it, we can put it into the plan. I'd be happy with that.

I'd work with Mr. Simard and my colleagues on what we would need to make sure that we have this in a way that allows us, as parliamentarians, to do our job, which is to reflect on public policy, particularly in a time of crisis, and report to the Canadian people.

I call a vote.

● (1110)

The Chair: Charlie, I'm willing to take that. There are some details that we'll need to figure out.

If you can read your motion, we'll vote on it with the commitment to come back to it during our committee business to look at how we insert it into the existing work plan that we have.

Mr. Charlie Angus: Okay. I move:

> That, given recent comments made by Suncor CEO Richard Kruger throwing into doubt their previously made commitments to reduce harmful GHG emissions, and reflecting a disturbing trend among major Oil & Gas producers; and
>
> given that the Suncor CEO Richard Kruger recently told his Board of Directors that Suncor will now act with a "revised direction and tone" and that he will act with "a sense of urgency" to maximize profits through a focus on fossil fuel exploitation; and
>
> given the fact that Suncor tripled its profits in a single year while pledging to eliminate 20% of its workforce and already laying off 1,500 workers this year; and
>
> given that the fact that Canadians have this summer witnessed the effects of unprecedented catastrophic climate disasters, a crisis that any reasonable person would recognize as showing the urgency for GHG emissions reductions; and
>
> given that the Canadian Oil & Gas sector are responsible for 28% of GHG emissions in Canada; and
>
> given that Canadians are counting on leaders in the Canadian Oil & Gas sector to do their part to tackle the global climate change crisis; and
>
> pursuant to Standing Order 108(2), the Standing Committee on Natural Resources invite Suncor CEO Rich Kruger to committee to explain why he believes that the only "urgency" facing the oil sector is to make as much money as possible while increasing production and abandoning their responsibility to help meet Canada's international climate commitments; that, given the urgency of the climate crisis, Mr. Kruger be invited to appear as soon as possible; that a report of this meeting be prepared and reported to the House; and that, pursuant to Standing Order 109, the government table a comprehensive response to the report.

The Chair: Thank you.

Ms. Dabrusin was on the list, so I'll have her speak now. Then we'll see where we are.

Ms. Julie Dabrusin: I want to propose what I think would be a friendly amendment to Mr. Angus's motion, which would be, in the last sentence of the invitation part, in the last paragraph, to say that "Mr. Kruger and other energy executives be invited to appear as soon as possible".

Mr. Charlie Angus: Okay.

The Chair: Mr. Dreeshen, go ahead.

Mr. Earl Dreeshen: To speak to the amendment, by "other energy executives", do you mean from...? We were talking about a really quick meeting, so my concern is what field these energy executives we are talking about are from. If we simply say "energy executives", we could be talking about a dozen people, a dozen CEOs, or many. I don't think the amendment is as concise as perhaps Charlie had indicated he wanted it to be when he was just going to talk to the one executive.

Perhaps I should stick with the amendment; however, I more or less disagree with most of what Charlie has said, other than that we'd like to invite him to come to talk.

The Chair: I'll go to you, Ms. Dabrusin, if you have a point of clarification regarding Mr. Dreeshen's concern.

Ms. Julie Dabrusin: My reference is really to oil and gas energy executives. I think perhaps there's wording we would want to use to try to massage that, but I think we can take that as our understanding going forward.

The Chair: Ms. Stubbs, go ahead.

Mrs. Shannon Stubbs: I think my colleague's point is relevant because what we're seeing here again is this false dichotomy from the left about energy companies in Canada. Of course, major multinational oil and gas companies are also the major investors in clean tech, innovation, renewable alternative energies and fuels of the future, and petrochemicals and hydrogen. It's not quite as simple as something being just an oil and gas company or only an oil and gas company. There are very few oil and gas companies in Canada that are focused exclusively on oil and gas, because they are multipronged energy companies whose expertise, technology, capabilities, skills and private sector dollars go into the whole array of energy development and all of the innovation and technology required. That's why Earl's point is relevant.

The Chair: Thank you, Ms. Stubbs.

Are you good? Okay. Monsieur Simard is going to pass.

What I heard was an amendment from Ms. Dabrusin, which we'll deal with first, which would be to amend the invitation to have the Suncor executive and executives from the oil and gas sector, so that would—

● (1115)

Ms. Julie Dabrusin: I said, "other energy executives". That was the wording I proposed. I would keep to that and then we would have an invitation list we could manage.

The Chair: Okay. We'll put the vote on the amendment to insert "other energy executives" in the invitation.

(Amendment agreed to)

(Motion as amended agreed to)

The Chair: When we get back to committee business, we can look at where we want to insert that into the agenda and at putting out the witness lists and all of those types of details. Thank you, members.

Thank you to our witnesses for their patience.

That having been dealt with, I'd like to welcome our witnesses from the four departments. Please correct me if I get any of your names wrong, which I inevitably will.

From the Department of Industry, we have Patrick Hum, acting director general, clean technology and clean growth. From the Department of the Environment, we welcome back Mr. Moffet, assistant deputy minister, environmental protection branch. From the Department of Finance—there are some familiar faces here as well—we have Miodrag Jovanovic, assistant deputy minister, tax policy branch; Greg Reade, assistant deputy minister, Crown investment and asset management branch; and Nelson Paterson, director general, economic studies and policy analysis division, economic policy branch. Last, from Natural Resources, we welcome back Frank Des Rosiers, assistant deputy minister, strategic policy and innovation.

I believe each department has a five-minute opening statement, so we'll go to those immediately. Does anybody want to go first?

Monsieur Des Rosiers, feel free. I have the clock here somewhere, I'll give you a signal when the five minutes are up and then we'll move on to the next person. Over to you. The floor is yours for five minutes.

Mr. Frank Des Rosiers (Assistant Deputy Minister, Strategic Policy and Innovation, Department of Natural Resources): Thank you, Mr. Chair. It's a pleasure to be here with all of you to launch this round of discussions on this important topic.

I'm accompanied, as you said, by colleagues from the Department of Finance, who will be able to unpack some of the measures that are contained in the most recent budget document, notably the tax measures; our colleague from Environment Canada, who will deal with issues ranging from regulatory issues to programs; and colleagues from ISED as well. I hope this group will be helpful when answering your questions.

I will focus my remarks on the global and North American contexts, as well as how NRCan is working with international partners to advance a competitive net-zero economy.

Canada and the world are faced with dual challenges: addressing climate change at one end and adjusting to shifting geopolitical contexts at the other. We've all seen what's been happening in Europe with the Russian invasion of Ukraine and the dramatic impact it had in terms of supply for the region. However, the impact was just as dramatic elsewhere in the world, in the Americas but also in Asia, where partners are looking for reliable suppliers of critical minerals and energy. Canada is ideally positioned to support them in that context.

[*Translation*]

The Government of Canada has committed to achieving net-zero emissions by 2050; domestic action and international partnerships will be key to achieving this objective. Canada is not alone in its energy transition ambitions. Many of our allies and competitors recognize the importance of the transition to their economic and strategic well-being.

[*English*]

The pandemic and the Ukraine crisis were sharp reminders of the importance of continued international co-operation in order to attain our energy security and affordability needs in this low-carbon future.

As an administrative point, if we look at what's been announced in the European Union, an amount in the order of 700 billion euros has been committed to accomplishing this energy transition. Similarly, in the case of the U.S., with the U.S. Inflation Reduction Act that was introduced a year or so ago, there is about $369 billion U.S. for energy- and climate-related actions in order to accomplish their varied objectives. Those are the measures, but there is quite a bit of pressure on us all to be able to compete in this marketplace.

Canada has been equally, if not more, ambitious in terms of climate actions, including $109 billion in spending to date, as well as a price on carbon. On a per capita basis, this is greater than what the U.S. has currently committed.

To illustrate that point, I'll give three quick examples, and we'll have a chance to unpack them during the session that follows.

On critical minerals, NRCan is working with the U.S., the EU, Japan and other friends and allies to develop and secure the supply chains needed for the development and supply of electric vehicles, batteries and so forth. On nuclear, we are also working on advanced nuclear power generation, including SMRs and nuclear fuel supplies. Lastly, on hydrogen, quite a bit of work is happening both in the east—in Quebec and Ontario—and the west to look at developing this very important vector for trade corridors, particularly toward Europe and Asia, which are eagerly looking for supply for decades to come.

In the context of budget 2023, the government has announced a number of spending and tax measures. We're going to hear from our Department of Finance colleagues on those more fully. They are fairly significant, ranging in the tens of billions of dollars for the year to come. I'm sure the committee took good notice of those, and I'm happy to entertain questions in that regard.

To note before closing, we are also working very closely with the U.S. Department of Energy, which has been a very strong partner with us for the past decades on a range of technologies, demonstrations and projects that will shape our going forward. The most recent visit of U.S. President Biden put a clear emphasis on energy, climate change and collaboration.

Allow me to close by noting, in the global context, the significant opportunities for job creation and economic growth. We are looking to our suite of measures to ensure the proper supports for workers around the country, so they benefit from the opportunities that come from energy decisions.

On this, I look forward to the discussion and the questions from all of you.

● (1120)

The Chair: Thank you for those opening comments.

I'll let everyone know that I have a couple of folders. It's a time-keeping thing. When there are 30 seconds left, I'll give you the white folder, and when the time is up, I'll wave the red. Wind up your comments. Don't stop mid-sentence. We'll then move on. It just keeps things moving.

We'll go now to our Department of Finance officials, if they're ready to go.

Whenever you're ready, the floor is yours for five minutes.

Mr. Miodrag Jovanovic (Assistant Deputy Minister, Tax Policy Branch, Department of Finance): Thank you for the opportunity to appear today concerning Canada's clean energy plans in the context of North American energy transformation. One of the key themes of budget 2023 was the announcement of a made-in-Canada plan to build a clean economy. Investment tax credits are a key part of that plan. My remarks today will focus on these investment tax credits.

Let me start with the investment tax credit for carbon capture, utilization and storage, or CCUS, which was first announced in budget 2021 with further details proposed in budget 2022 and budget 2023. CCUS technologies are an important tool for reducing emissions in high-emitting sectors where other pathways to reduce emissions may be limited or unavailable.

The intent of this tax credit is to incentivize businesses to invest in CCUS to reduce their greenhouse gas emissions. It would provide a refundable tax credit of 50% for investments in capture equipment—60% for direct air captures—and 37.5% for investment in transportation, storage and use equipment. It would be available to the extent that projects use captured CO2 for dedicated geological storage or storage in concrete, but not enhanced oil recovery.

[*Translation*]

Second would be the investment tax credit for clean technology, the details of which were first announced in the 2022 fall economic statement. The intent of this tax credit is to incentivize businesses to adopt clean technologies to support decarbonizing electricity generation, heating and industrial activity. It would provide a refundable tax credit of 30% to investments in eligible clean technologies. The credit would be available to businesses that incur eligible expenses starting on March 28, 2023.

Third is the investment tax credit for clean hydrogen, which was first announced in the 2022 fall economic statement. The intent of this tax credit is to incentivize businesses to invest in clean hydrogen production. As an energy source and an energy carrier that does not release greenhouse gases, hydrogen is becoming an increasingly important source of clean energy to global net-zero strategies. It would provide a refundable tax credit that varies based on the life-cycle carbon intensity of the produced hydrogen, as measured by Environment and Climate Change Canada's full life cycle assessment model, with lower carbon intensity projects receiving higher credit rates.

In terms of eligible investments, it would be available for equipment required to produce hydrogen from electrolysis, and to produce hydrogen from natural gas with CCUS.

[*English*]

The fourth investment tax credit announced by the government is the investment tax credit for clean technology manufacturing, which is meant to incentivize businesses to invest in the equipment needed to manufacture clean technologies. It would provide a refundable tax credit of 30% to support investments in machinery and equipment used in the manufacturing of clean technologies, as well as in the extraction and processing of key critical minerals essential for clean-technology supply chains. The credit will be available to businesses that incur eligible expenses starting on January 1, 2024.

Last is the investment tax credit for clean electricity, which is intended to incentivize all power producers, both private and public, to make investments that support net-zero electricity and an expanded clean electricity grid. It would provide a refundable tax credit of 15% to support investment in clean electricity infrastructure. To access the credit, commitments would have to be made by a competent authority in each province and territory that the federal funding would be used to lower electricity bills and to achieve a net-zero electricity sector by 2035. The credit would be available as of the day of budget 2024, but only for projects that did not begin construction before March 28, 2023.

One novel feature that I would like to highlight is the inclusion of labour requirements that are meant to ensure that workers share the benefits of these investments. In the case of the investment tax credit for CCUS, clean technology, clean hydrogen and clean electricity, in order to access the highest tax credit rates, businesses would need to pay workers prevailing wages and ensure that apprenticeship opportunities were being created.

● (1125)

I'll conclude my remarks with a brief update on the development of these investment tax credits. It's important to note that enacting legislation must receive royal assent before any of the investment tax credits can be administered by the Canada Revenue Agency. Development of the credits is proceeding along different timelines, partly reflecting staggered coming-into-force dates.

In August, the government released draft legislative proposals for the CCUS and clean technology investment tax credits, as well as the associated labour requirements for public consultation. These consultations concluded on September 8.

The government is working to release further details on the clean hydrogen investment tax credit, recognizing the importance of finalizing design details and introducing legislation as quickly as possible. This is also the case for the clean technology manufacturing tax credit.

With respect to the clean electricity investment tax credit, a number of policy issues still need to be established. The Department of Finance will be engaging with provinces, territories and other relevant parties to develop the design and implementation details.

Thank you.

The Chair: Great. Thank you for your opening comments.

Now, Mr. Moffet, if you're ready, we can go to you for your five minutes. The floor is yours.

Mr. John Moffet (Assistant Deputy Minister, Environmental Protection Branch, Department of the Environment): Thank you, Mr. Chair.

It's a pleasure to be here today to talk about these issues.

As this committee has emphasized, the ongoing energy transition presents both opportunities and challenges, and will require the transformation of Canadian industries and the labour market. The government recognizes the need to drive this transformation and to help workers and communities adapt to it, and the work of this committee will be very helpful.

In thinking about these issues, it may be helpful to distinguish three broad objectives.

First, we have a variety of policy measures designed to reduce the use in Canada, by individuals, businesses and industries, of emitting fuel. The widespread use of clean electricity and other forms of clean energy will be foundational for achieving a net-zero emissions economy by 2050.

Second, we also have a variety of policy measures designed to reduce the emissions from the production of carbon-based fuels. Even as Canada reduces its own demand for oil and gas, there is going to be continued demand by other countries, so to the extent that Canadian companies respond to that demand, we need to ensure they produce that fuel as cleanly as possible.

Third, the government is supporting the development of clean energy and associated technologies and components throughout the supply chain, both to support the domestic energy transition and to take advantage of the growing global demand for clean energy.

These goals are being supported by the all-of-government approach, described by my colleagues, with a wide range of measures.

I'll now speak for a moment about our approach to regulations.

While we appreciate the importance of regulatory stability for attracting investment, we are also working in an unprecedented situation in which there is a need to drive further greenhouse gas reductions and to build the regulatory and policy foundation for the clean energy transition. In this fluid context, we are trying to operate in a way that is as transparent as possible, signalling clearly the various new regulatory measures that we are developing and engaging extensively to ensure that these regulations are well designed and can provide a durable basis for long-term investments.

I'd like to reassure the committee that our work to decide when to regulate, how to target regulations and what requirements to include is informed by the considerations you've identified. The regulatory impact analysis statements that accompany every federal regulation, for example, provide detailed information about technical and economic feasibility, regional employment and other economic impacts—all factors that we consider throughout the development of all our regulations.

To attract investment in clean energy projects, the government also recognizes the need to make project approvals as predictable and efficient as possible. These objectives are the focus of the budget 2023 commitment to improve the efficiency of the federal impact assessment and permitting processes for major projects in Canada.

I look forward to your questions and to the results of your important work.

Thank you.

● (1130)

The Chair: Thank you.

Now we'll go to our representative from the Department of Industry.

Mr. Hum, whenever you're ready, the floor is yours.

Mr. Patrick Hum (Acting Director General, Clean Technology and Clean Growth Branch, Department of Industry): Good morning. I'm pleased to be speaking with you today, representing the department on the subject of clean energy.

ISED's mandate is to work with Canadians in all areas of the economy to improve conditions for investment, enhance innovation performance, increase Canada's share of global trade and build a fair, efficient and competitive marketplace.

The department has a purview across a wide range of industrial sectors, from steel and aluminum, chemicals and plastics, cement and concrete, critical minerals, clean technologies, automobiles, aerospace, space and marine to digital, AI and quantum, to name several.

As ISED undertakes its work, there is recognition that the competitiveness and growth potential for Canadian industry will include access to and use of clean energy. For instance, the use of hydrogen and renewable natural gas could significantly lower the emissions intensities of industries like steel and cement.

However, as the mandate for the committee's study quite rightly points out, Canadian businesses face stiff competition as other countries, including the United States, seek to provide their industries with a similar clean energy advantage.

[*Translation*]

As Canadian industry and other countries seek pathways to decrease emissions and sources of clean energy, Canada's dynamic and robust clean technology sector is well positioned as a supplier of choice for hydrogen, low-carbon and renewable fuels and wind technologies, as well as for clean digital technologies and services which is an area of significant innovation.

In this context ISED uses its range of regulatory, legislative, policy and program tools in support of the government's clean growth and clean energy priorities. For example, ISED and Natural Resources Canada deliver the clean growth hub initiative, a unique whole-of-government focal point dedicated to helping Canadian clean technology innovators and adopters navigate the vast array of federal programs and services most relevant to their needs.

Since its creation in 2017, the hub has served over 2,700 small- and medium-sized enterprises across Canada, leveraging the knowledge, expertise and network of its 17 member departments and agencies to provide tailored advice. In 2022, approximately 44% of its clients were companies in the clean energy sector.

[*English*]

ISED also created the industrial decarbonization team, or IDT, to support large-scale clean energy and decarbonization projects through enhanced collaboration across departments on federal programs and regulatory issues. The IDT assesses and provides advice on projects that require more tailored support in view of their complexity and ability to accelerate Canada's path to a competitive net-zero economy.

Another part of the federal government's clean technologies and clean energy tool kit is the strategic innovation fund's net-zero accelerator. The $8-billion net-zero accelerator initiative is a tool to help support Canada-wide GHG emissions reduction targets, groundbreaking investments in low-carbon fuels and clean energy-related technologies in areas such as fuel cells, small modular reactors and wind energy.

Clean energy-related investments include a $15-million contribution to AVL Fuel Cell Canada for a hydrogen fuel cell R and D centre in Vancouver and $25 million to LM Wind Power for the expansion of large, complex wind turbine blade production in Gaspé.

Budget 2023 provided an additional $500 million to the program to support clean technologies and redirected $1.5 billion of its existing resources toward projects in clean technologies, critical minerals and industrial transformation.

With that, thank you. I'd be happy to take your questions.

● (1135)

The Chair: That's great. Thank you.

Thank you to all of the officials for the very tight opening comments. It's really appreciated.

We're going to now get into our first round of questions. For the members, we should be able to get through at least the first two rounds and, possibly, a bit of the third.

Welcome, Mr. Morrice, to our committee, as well as Mr. Fonseca.

If there is time at the end, Mr. Morrice has requested time, which would require unanimous consent unless somebody offers their time as we go through the rounds. We'll deal with that when we get to the end.

First up, we have Mrs. Stubbs, who will have six minutes on the clock.

Mrs. Shannon Stubbs: Thank you, Chair.

Thank you to the officials for being here. It's nice to see all of you again as well.

Mr. Moffet, certainly on your comments, Conservatives on this side of the table looked at each other in full agreement with you that global oil and gas demand will continue to increase. That's why Conservatives believe that the very last barrel of oil and gas used in the world ought to be from Canada, instead of the Liberal approach, which is to cede ground to dictators, despots and regimes with much lower environmental standards.

I must confess that it's a little odd to hear comments about the clear requirement in Canada to reduce permitting and regulatory timelines and fix the Impact Assessment Agency. I say this on behalf of all Conservative colleagues at this table, but I guess in particular because it just happened to be specifically me during the debates on Bill C-69 who warned that the government spin on the legislative timelines the bill would implement wasn't, in fact, true, and that there were multiple ways in which the bill had the ability for members of both the regulatory body and the cabinet to stop, start and extend the regulatory process repeatedly over private sector proponents.

I can also say that at that time—because it was again, oddly, specifically me—Conservatives warned that what that would do would be to create potentially endless timelines and uncertainty for private sector proponents and therefore make the regulatory decisions and permitting for all kinds of energy projects in Canada uncompetitive against the rest of the world. I'm not sure why Canadians ought to believe that the government that brought in this system, which was broken in the first place, will be the ones to fix it, but suffice it to say Conservatives agree with those two main principles you talked about.

For the finance department officials, one thing I'd like you to explore a bit more for this committee and for Canadians is the difference between investment and production tax credits. One of the main reasons the U.S. IRA is a threat to Canadian competitiveness, of course, is their inclusion of production tax credits, which are ongoing and based on actual outcomes—actual environmental and energy results—rather than, in Canada's context, only first-time early initiative incentives.

I invite any or all of you to make any comments on maybe the relative advantages and disadvantages of investment versus production tax credits and any consideration of that in Canada's context.

Mr. Miodrag Jovanovic: Thank you for the question.

That is a fundamentally important question. In Canada, we tend to favour investment tax credits as opposed to production tax credits, and the United States is using both. More recently in the IRA, they have expanded significantly on their production tax credits. They had that in their system already before now. The investment tax credits basically support capital investment up front, so it has, in a way, the advantage when it comes to securing financing to be able to count on that up front, while production tax credits basically support opex—operating expenses.

It's going to vary depending on the project as to which one is preferred. In a way, I think it's back to the relationship between initial capital spending and opex. In the United States, production tax credits would last between 10 and 12 years depending on the credit, which also means that if you do a major investment up front you can count on that for maybe 10 years, but after that it's done. That's another way to look at this. If you have a major infrastructure project that is very costly, sometimes you may prefer the investment tax credits up front, because you get it up front and you get it for the effectively the whole life of the project, and often it easily goes up to 20 years.

It's a question of choice and a question of the predisposition. In a way, the systems in Canada and the United States are also very different. In Canada, we do have a national carbon pricing regime. In the United States, they don't, and that is kind of factored into the idea of how you want to support things. In a way, being able to sell your carbon credits is a way to bank that in addition to the investment tax credits.

That's the context and comparison.

● (1140)

Mrs. Shannon Stubbs: Thank you. I appreciate your comments.

It seems to me that production tax credits pose an especially challenging competitiveness issue for Canada, especially for the development of projects like hydrogen, critical minerals and manufacturing.

On the issue of permitting reform, since you raised it, of course the U.S. IRA bill as well as their debt ceiling bill took very aggressive actions on reducing the permitting and regulatory time frame. Their debt ceiling bill has a target for under two years. The IRA obviously wants to pursue permitting timeline reductions. This seems to me to be the low-hanging fruit with which Canada should take full control of our own situation to be able to compete, rather than try to chase the U.S. down a dollar-for-dollar subsidy spiral.

The trouble for Canada, of course, is that it takes up to 25 years to get a mine built. The disaster for Canada is already demonstrated in terms of LNG. The U.S. built seven LNG projects and approved 20 more in the same timeline that we approved only three, with one actually being constructed.

Can you give any concrete details in terms of timelines under consideration for those assessment reforms? When will Canadians and all of us know what the intended timeline reductions are?

The Chair: I'm sorry. We ran out of time. That's six minutes. That may be something that one of your colleagues or others on the committee may want to pick up on when it comes to them. That was a good round of questions.

We'll go next to Mr. Chahal, who will have six minutes on the clock.

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

Thank you to the officials for joining us today.

I'll start with you, Mr. Hum. You talked about the importance of renewable energy in attracting business in Canada in sectors like steel and others. How important is having a clean energy grid to attracting business to Canada?

Mr. Patrick Hum: Certainly, I would say it's extremely important, in industries that are particularly energy-intensive and trade-exposed, to access clean energy to reduce their carbon intensity. We see that in sectors like aluminum, for instance. Canada produces amongst the lowest carbon-intensive aluminum in the world. These are important factors for export markets. Industries definitely look to Canada, and these industries in particular, to have access to clean energy.

Mr. George Chahal: Thank you.

Mr. Jovanovic, you talked a lot about the ITCs. I want to focus in. How many billions of dollars of economic activity and jobs do you anticipate Canada will receive with the ITCs you've put in place?

Mr. Miodrag Jovanovic: Thank you for your question. I can talk about investment in terms of the money or the spending that these ITCs would represent for Canada. I may turn to my colleague to see if he has anything to add; I'm not sure.

To give you some idea, over the next five years, we project the cost of the five ITCs I mentioned to be nearly $28 billion. If you project that to the next 10 years, that is more than $64 billion, and to the next 12 years, by their expiry dates, we're at about $83 billion of forgone revenues, if you will. Therefore, it is very, very important.

● (1145)

Mr. George Chahal: Thank you.

What are you hearing from the industry? Alberta Conservatives have put a moratorium on renewable energy in Alberta. We've seen, some experts say, $33 billion in losses and thousands of jobs that are going to be impacted. Have you heard from industry on the impacts, and can you verify those numbers?

Mr. Miodrag Jovanovic: I haven't really had any discussion on that specific aspect. The industry hasn't reached out to me directly on this, so I can't really comment on it.

Mr. George Chahal: Mr. Des Rosiers from Natural Resources, could you comment on the impact on the industry? Have you heard from the Canadian renewable sector on the impact of a moratorium on industry, moving forward, in job losses and investment?

Mr. Frank Des Rosiers: We certainly heard a number of companies express preoccupation with the state of the marketplace, but given what our recent development has been, I don't think we have any quantitative assessment of what dollar-value impact this would have.

My understanding is that the Alberta government is quite seized with the importance of going through this process in a timely way to ensure the investment climate...which has led to so many great projects in Alberta. As was noted earlier by one of the committee members, we've had a record number of great clean energy projects in Alberta at very low cost, and I think both the provincial government and the country overall benefit very much from those.

I think everybody is motivated to make sure the rules of the game are established quickly and the investments can flow.

Mr. George Chahal: Why have a moratorium? Why stall the industry when it's growing and being a national leader? Thirty-three billion dollars and thousands of job losses are big numbers. Do you think there will be a drastic impact to the renewable energy sector with this moratorium?

Mr. Frank Des Rosiers: I don't think it would be appropriate for me, as a federal official, to comment on how the province wants to carry out its affairs, but what I can certainly emphasize, as was illustrated by Minister Wilkinson in recent statements and with the electricity grid recently established, is that there's great need for clean power in this country.

This is why, in budget 2023, there is such emphasis around expenditures and tax measures, to which our colleagues from the finance and tax department just spoke, to make sure we are able to significantly expand the size of clean power production in the country.

Estimates vary, depending on which source you rely on, but I think there is broad agreement that we need to at least double the size of the power grid between now and 2050. Just think about that. It took us a century and a half or so to build the grid as we know it today, and we need twice that. Recognizing how big those projects are and how complex they are and how important it is to make sure that our workers and our communities are consulted in this, this is not a small feat.

Countries around the world—Canada, the U.S. and Europe—are faced with similar challenges. The good news is that Canada has lots of options in terms of clean power, whether we're looking at hydro, at wind, at solar or at a range of other options including nuclear. We are capable of getting there, but it will require quite a lift from the whole country.

Mr. George Chahal: Yes, we are facing blackouts or potential blackouts over the winter and summer months. I was shocked when I heard about the moratorium.

You would agree that all sources of energy are important as we move forward. I believe you said that. Is that correct?

Mr. Frank Des Rosiers: It's been the government's view that we want to encourage all of those different sources. Again, Canada is blessed with such options, so we might as well use them. We are the envy of the world. Every time we meet with foreign delegations, that's one thing they take away from those meetings.

Mr. George Chahal: Thank you.

The Chair: We are out of time on that round.

We're going to continue on and go to Monsieur Simard, who will have six minutes on the clock.

[*Translation*]

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

Mr. Des Rosiers, I will turn to you, but if your colleagues want to answer, I am open to that.

I will try to explain one of my recurring impressions when it comes to energy in Canada. People are said to be responsible for roughly 20% of emissions in Canada. Various sectors are also responsible for their share of emissions, but the oil and gas sector is responsible for the lion's share. However, I have the impression that what we have been doing since I arrived here in 2019 is trying to move from very dirty oil to slightly less dirty oil. Your strategies seem to be based on that. In the last budget, $80 million was announced for a low-carbon economy.

Take 2022 as a reference year: all the major oil companies posted $220 billion in profits, which is a record year, the likes of which we've never seen. The only thing the Standing Committee on Natural Resources is talking about is how we can help these people decarbonize their sector. Is it possible that low-carbon oil is not commercially viable?

If I start with that idea, then it's up to us, collectively, to assume the risk. It's up to the taxpayer to assume the risk of a low-carbon oil, or hydrogen made from oil. However, these companies are raking in obscene profits. It seems that what's polluting the federal government's energy policy is this oil straitjacket, and personally, I wonder when we're going to break free of it.

Earlier, you told my colleague Mr. Chahal that we needed more investment in the wind and solar energy sectors. I would be curious to know if you have a table showing the specific sectors in which you invest and the distinctions that can be made between the oil and gas sector and the wind, solar and hydro sectors. Is there anything like that in the department?

● (1150)

Mr. Frank Des Rosiers: It's a broad question, Mr. Chair, but I'll try to answer it as best I can.

I appreciate the member's concern about the oil and gas sector. If you look at the overall picture of emissions in Canada, a quarter of them come from transportation, a quarter from homes and buildings, and the rest are divided among the various industrial sectors. The oil and gas sector is certainly the major contributor to these emissions.

The government has put a lot of effort into supporting all industrial sectors, including the oil and gas sector, by setting emission targets and limits, but also technologies to help these sectors meet these targets. Carbon capture, utilization and storage, or CCUS, is one of these technologies. As my colleague mentioned earlier, this cross-cutting technology applies to a number of industrial sectors, including steel and cement, but also oil and gas, which intends to make extensive use of it. When representatives of these sectors appear before the committee, they will be able to talk about their plans in more detail.

The International Energy Agency forecasts that oil production will eventually peak and decline, but there will always be oil and gas production in the world, if only for non-combustion needs, whether for plastics, lubricants and so on. That market will exist, but Canada's ambition is to aim for low-carbon production.

Mr. Mario Simard: I understand Mr. Des Rosiers, but I would like to give you a concrete example.

I went with you to Berlin, where we met with people from Siemens. If we want to make blue hydrogen, even if we don't want to talk about colour, these people explained to the minister that they felt they would never provide this technology, because there are two important things to remember. The first is market risk, which governments should assume: a hydrogen molecule costs more if it's made from natural gas.

Second, I clearly remember that the Siemens representative also talked to me about technological risk. I'm sure there isn't a government that wants to take on that risk. That's why Siemens will never do an electrolyzer that incorporates a carbon capture strategy.

I listen to Siemens, because these are people who have expertise in this area. One of the biggest energy companies says that we're on the wrong track if we try to make hydrogen with carbon capture strategies, because the costs are much too high. I see that the government is prepared to invest a lot of money in this type of technology, and I wonder whose interest we're serving. Are we ultimately targeting what's reasonable, in other words, trying to decarbonize energy sources, or are we serving the interests of the big oil companies?

Mr. Frank Des Rosiers: I think you said it well: the position of the Government of Canada and, incidentally, of the other G7 countries is to aim for low-carbon hydrogen production. That's how taxation measures were designed, based on the level of carbon intensity. There are a number of ways to achieve that goal, and you mentioned one of them: the use of electrolyzers.

The use of natural gas with carbon capture allows for very low carbon intensity rates. In addition, the technology is proven, so there's really nothing to worry about technologically. Siemens is not a player in the field, let's be clear, but there are many other players keen to offer such technologies, including Canadian companies.

Technological risk is always present, because there is no such thing as zero risk, but there isn't great concern about carrying out such projects. For the past 30 years, we've been carrying out projects using CCUS technology that have already been tested to scale. It remains a worthwhile approach. It remains to be seen which route will be most attractive to investors. However, we're already seeing projects using electrolyzers in the east and CCUS technology in the west, and both are generating strong interest in Europe and Asia.

● (1155)

[*English*]

Mr. Greg Reade (Assistant Deputy Minister, Crown Investment and Asset Management Branch, Department of Finance): Can I add a response, Mr. Chair?

The Chair: We're actually out of time on this one.

Mr. Greg Reade: No problem.

The Chair: Okay. Thank you.

We'll go now to Mr. Angus, to make sure that everybody gets their rounds of questions.

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

Mr. Charlie Angus: Thank you, Chair.

Thank you, gentlemen. This is a really important discussion.

Since the Ukraine war, we've seen massive investments in Europe to move forward on clean tech and get off Russian oil and gas. Since the Biden administration came in, we've seen $240 billion in clean energy, $70 billion in the electric vehicle supply chain and $10 billion in solar manufacturing. There's a real concern that, if we don't move quickly, we are going to be left on the sidelines as those investment dollars move into the United States.

Mr. Jovanovic, is the Department of Finance looking at this with a sense of urgency? I know Mr. Kruger from Suncor believes the urgency is Suncor making as much money as possible. Other Canadians think the urgency is dealing with the climate crisis.

Does the finance department believe that getting these tax credits out quickly is an urgent matter?

Mr. Miodrag Jovanovic: Thank you for the question.

The short answer is yes. We are working diligently on finalizing draft proposals for all five of these credits.

As I mentioned in my remarks already, in August we released for consultation draft legislative proposals for the clean-tech investment tax credit, as well as the CCUS, where we're approaching the finish line—we've been consulting already three times—as well as the labour requirements that would apply to the four investment tax credits.

Our goal is, by the end of this fall, to be able to release draft proposals, then the next one on the clean hydrogen ITC and then the clean tech manufacturing ITC.

Mr. Charlie Angus: Thank you.

In terms of the clean manufacturing credit, correct me if I'm wrong, but that was the one that did not have labour obligations for apprenticeship or prevailing wage standards, whereas the Biden administration has made it very clear to blue-collar workers in the United States that manufacturing of clean tech is going to be tied to jobs.

Why has the department left those apprenticeship and prevailing wage standards out of the manufacturing for clean tech?

Mr. Miodrag Jovanovic: We can double-check that.

My understanding, with respect to the advanced manufacturing production tax credit in the United States, is that labour requirements do not apply. They may apply for the advanced energy project credit, which is the small remaining credit that is worth about $10 billion, depending on the estimate of course, compared to between $30 billion and $250 billion for the other one, for which the labour requirements—again, based on my understanding—do not apply.

Mr. Charlie Angus: We'll have to look into that, because when I talk to workers in the building trades, IBEW workers, particularly in the energy sector, they want to know that they're going to be part of this and not be left on the sidelines.

Mr. Des Rosiers, I'd like to ask you this in terms of the urgency of getting this off the ground given the amount of international competition. Calgary Economic Development recently did a study that said 170,000 jobs alone would be created in Alberta because there's no place else in Canada that has even close to the potential that Alberta has, yet we've seen the Danielle Smith government, for ideological reasons, kill billions of dollars in investment. That investment has threatened to go south.

Have you analyzed the potential impact of not getting those projects off the ground and whether or not that investment is going to go stateside?

Mr. Frank Des Rosiers: As I mentioned in my previous response, we don't have any quantitative estimates on this. We did hear preoccupations being voiced by firms, including publicly—and I think all of us would have seen this in the media—and their urging to try to bring this to the investment climate so the money can start flowing quickly. I'm encouraged that we'll eventually get there—hopefully, soon.

● (1200)

Mr. Charlie Angus: I certainly hope so. We've certainly spoken to many people in the west who were really ready to take advantage, and they have the expertise. If we lose that moment, it's going to hurt us.

Mr. Moffet, I wanted to ask you if you have read the recent International Energy Agency report that was released last week on the need to de-risk from financial investments in fossil fuels. Has your department read that report?

Mr. John Moffet: Yes, we have, certainly.

Mr. Charlie Angus: They are saying, "We are witnessing the beginning of the end of the fossil fuel era and we have to prepare ourselves for the next era".

Fatih Birol from the IEA states:

> Oil and gas companies may not only be misjudging public opinion...they may well be misjudging the market if they expect further growth of oil and gas demand across this decade.
>
> New large scale fossil fuel projects carry not only major climate risks but major financial risks.

How do you assess the IEA's warnings to companies that are preferring to drill down on oil and gas rather than diversify? Do you think that is a threat to our economic competitiveness?

Mr. John Moffet: I think the government is wrestling with the question of what is the right balance in terms of driving domestic reduced demand for oil and gas—something we can control and where we are well ahead of the rest of the world—versus the question of what the role is of Canadian oil and gas in responding to global demand. Your question, then, is this: Are there competitiveness risks in overemphasizing domestic production?

Mr. Charlie Angus: It's also a climate risk. This is—

The Chair: We're out of time on this one. There's not going to be time for any back and forth here, but thank you.

We're going to go now to a five-minute round for the first two questioners, beginning with Mr. Falk.

When you're ready, the floor is yours.

Mr. Ted Falk (Provencher, CPC): Thank you very much.

Thank you, to the officials, for your presentations.

Mr. Des Rosiers, I'm going to start with you for a little bit. You talked about being a dependable supply chain to new energy sources. We know that mining is going to be critical to that. We know that exporting clean energy like LNG is going to be critical to meeting those objectives. How has Bill C-69 impacted what you say is critical to moving forward?

Mr. Frank Des Rosiers: There is always a preoccupation around the legislation itself but also with the regulatory environment writ large.

Allow me to make three observations. I hope they'll—

Mr. Ted Falk: Maybe you could just tell me that, because I have more questions.

Mr. Frank Des Rosiers: Of course. The preoccupations around timeliness and efficiency have been very clearly captured in budget 2023, and I can assure you that Mr. Wilkinson sees this as very much top of the pile in terms of things he wants to tackle with industry and PTs. This was discussed at the most recent annual meeting of provincial and territorial ministers in Quebec City last month, so it's really a top preoccupation.

There was also $1.2 billion announced to provide funding for regulatory agencies, the Impact Assessment Agency and the Canada Energy Regulator to speed up permitting to make sure those projects get moving. Also, as part of the regional energy and resources tables, on which I understand you've been briefed previously in presentations by Minister Wilkinson, the pace has been picking up in B.C. but also in provinces around the country to launch those, and many provinces did identify the issue of regulatory efficiency as a key preoccupation on which they want to see progress.

There is lots of engagement going on and a shared goal of trying to speed it up.

Mr. Ted Falk: Thank you.

Mr. Jovanovic, I just want to ask you a few questions. Recently this government made commitments to both Volkswagen and Stellantis. Can you confirm the amounts of those commitments?

Mr. Miodrag Jovanovic: I'm sorry, Mr. Chair, but we don't have the people responsible for this at the finance department, so I can't really....

Mr. Patrick Hum: We'll have to come back to you on that. We can get those numbers. From an ISED perspective, we can share those numbers at a later date.

● (1205)

Mr. Ted Falk: I would surely think so. I'm surprised that the finance department wouldn't have those numbers, considering that the media seems to have them. I'm surprised you wouldn't.

Mr. Greg Reade: Our colleagues who are responsible for those deals are not at the table today.

Mr. Ted Falk: Okay. I guess then you probably wouldn't know whether it's being looked at as a PTC or an ITC. Minister Champagne alluded at one point that there wouldn't be any commitment by Canada until there was actual production. I want to confirm what the vehicle for that support would be.

Mr. Greg Reade: I can comment on that. There's a range of support being provided, from capital support through the strategic innovation fund and bespoke agreements that will act as production subsidies. You're quite right that funding will be paid on the basis of production, in terms of the energy produced for battery units. If there is no production, those parts of the support don't flow out, although the capital would flow out at the front end as per normal practices when they build the facilities.

Mr. Ted Falk: The capital would flow out, but it's based on production.

Mr. Greg Reade: No, it's just that there are different components of support. The facilities are the recipients of strategic innovation fund support, which is traditionally structured on the capital, so building facilities and some of the equipment. I don't know the details, but I can get back to you on that. Separately there was a—

Mr. Ted Falk: Can you also confirm whether the Parliamentary Budget Officer is correct that the payback isn't in five years but in 20 years?

Mr. Greg Reade: I can't confirm that.

Mr. Ted Falk: You haven't done the math in your department, or is this for those other people who aren't here?

Mr. Greg Reade: We've done the math, but you said that the public reporting.... The Parliamentary Budget Officer, I would assume, worked with our colleagues to answer questions.

Mr. Ted Falk: Who's right? Nobody knows.

Mr. Nelson Paterson (Director General, Economic Studies and Policy Analysis Division, Economic Policy Branch, Department of Finance): I could add some colour to that.

There are two approaches that have been used. The calculations were made by ISED for the federal government number, but basically they're just using different methodologies based on similar underlying assumptions about what the projects would be. It depends on what the PBO is choosing to use in their assumptions.

Mr. Ted Falk: I think I have one question left.

The Chair: That's five minutes. It goes quickly.

We're going now to Madame Lapointe, who will have five minutes on her clock.

[*Translation*]

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

Mr. Des Rosiers, as the member for Sudbury, I know that Canada has a natural advantage when it comes to critical minerals and mining.

[*English*]

To be competitive with the Inflation Reduction Act, what steps are we taking to ensure that critical minerals are refined domestically?

Mr. Frank Des Rosiers: From the get-go, when Canada announced that goal and the Prime Minister made that commitment and reiterated it in the budget, we made it clear that the ambition was looking at the full suite. It's not just resource extraction, but looking at processing and transmission all the way to batteries and vehicles.

For the strategic plan that was announced, the Canadian critical minerals strategy, $3.8 billion has all of those economic supports present. It's been vetted in the House and approved, and the work is under way to make it happen.

It would be hard to summarize in one minute how the $3.8 billion will be disbursed, but it goes across the entire value chain. Right now, there is a lot of emphasis on international collaboration to try to speed up technologies to extract the resource in a way that is environmentally friendly. We do not want to replicate the approach that has been used in other countries, like China, so that we can minimize the impact on land, air and water. There is a lot of good work happening with the Americans, the Japanese and the Europeans on this right now.

Ms. Viviane Lapointe: I'm pleased with that response. I'm going to take it one step further.

I believe the supply chain and the associated jobs should remain local to the resources' geographical locations, especially when you think about reducing our processing footprint.

What is Canada doing to create a framework for processing the critical minerals necessary for EV batteries to ensure that the value-added benefits are not moved outside of Canada and outside of its mining regions?

● (1210)

Mr. Frank Des Rosiers: I must say, when we have engagement with foreign investors—we were talking with the Japanese this week and with the Germans last week—they actually see this as a benefit for their investments. The fact that they don't have to ship their feedstock, as is the case right now, across the world back and forth multiple times....

It's truly a crazy set-up that we currently have, and it just cannot be scaled up at the scale that the planet needs it to be in terms of having those hundreds of millions of EVs on the road. The fact that Canada is able to supply those locally—whether it's in a region, in a city or nearby—is one of those key reasons why they made those large investments, whether it's Volkswagen or whether it's Stellantis and others to come.

There is not one solution to make it happen, but bringing together all the key actors in this space—from those doing the raw extraction to the fabricators of anodes, cathodes, batteries and the electric vehicles themselves—to talk and engage. The deal making has been happening very rapidly. Canada has oftentimes been the convener of those groups of domestic and foreign investors to make this happen, but we've had dozens of commitments being made, and many of them have been announced already.

Ms. Viviane Lapointe: Thank you.

It's important that the departments of natural resources and finance are working together.

My question is for the assistant deputy minister of finance.

I often hear from stakeholders that we need to facilitate the mining of natural resources in Canada. With Canada's critical minerals being a key component of batteries for zero-emission vehicles, how are we increasing funding for critical mineral extraction and how can we ensure that funding is accessible expeditiously?

Mr. Greg Reade: I can start. I don't know if Patrick wants to lean in as well.

In the context of funding announced in the budget for critical minerals, there were explicitly different parts of that funding for different parts of the value chain. Through our industrial support programs, they've taken aim at different parts of that supply chain.

I'll pass it over to Patrick on that funding part.

Mr. Patrick Hum: ISED has access to $1.5 billion through the strategic innovation fund for critical minerals. The department has already made investments in several companies, including E3 Lithium,, Rio Tinto Fer et Titane. Those are important critical mineral-related investments. The investments in the automotive supply chain and others are really telling of where Canada stands.

The other aspect I'd raise, to Frank's point, is that access to energy to process some of these minerals is extremely important. It just lowers the carbon intensity of these products as they get into the value chain.

The Chair: That's the five minutes.

We're now going to go to Mr. Simard, who will have two and a half minutes on the clock.

[*Translation*]

Mr. Mario Simard: Mr. Des Rosiers, I'd like to ask a quick question, since we're talking about critical minerals. As far as I know, the list of critical minerals was opened in 2023, wasn't it?

Mr. Frank Des Rosiers: I think the Canadian list was published before that, in 2021, if I remember correctly.

Mr. Mario Simard: I'm talking about opening up the list to recognize new critical minerals. I think we were told it was 2023.

Mr. Frank Des Rosiers: Okay. I misunderstood. I thought you were talking about the initial list.

Mr. Mario Simard: Is it 2023 or 2024?

Mr. Frank Des Rosiers: I can't tell you right now, but there is certainly an opening for dialogue.

Mr. Mario Simard: Okay. I'm asking because there are currently two major phosphate projects of great interest. First Phosphate and Arianne Phosphate want phosphate to be added to the list of critical minerals, which would give them advantages in their financing and give them access to Natural Resources Canada research and development programs. Given the purity of the phosphate found in these two companies, they occupy a prominent position in the battery industry. Unfortunately, during meetings with them, I heard that they were struggling to get answers from the department.

Do you know where things stand right now on the phosphate issue and the possibility of adding it to the list of critical minerals?

Mr. Frank Des Rosiers: No, but I can certainly commit to following up on this.

Mr. Mario Simard: Okay, thank you.

Mr. Hum, you piqued my curiosity earlier when you talked about aluminum. You mentioned that work was being done to decarbonize the aluminum sector. That was my understanding. I assume you were referring to the ELYSIS technology, and I always find that surprising. I admit that the ELYSIS technology is a very good thing and that we need to decarbonize the aluminum sector—I'm talking about it because it's where I live, in Saguenay-Lac-Saint-Jean—but we're the greenest primary aluminum producers in the world. That was the case even before ELYSIS. So I think it's a bit of an unrealistic question and a bit of a rhetorical tool.

When I hear people telling us that ELYSIS will decarbonize the aluminum sector, I find the rhetoric rather strange, since we already know that the greenest primary aluminum producers in the world are in Quebec. In fact, I'd like to point out that this will eliminate jobs, since it's a new technology that requires far fewer people.

I'd like to hear your views on this and on what you wanted to say earlier.

● (1215)

[*English*]

The Chair: We're out of time unfortunately on that side, so we won't have time for a response.

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

Mr. Charlie Angus: Thank you.

The Department of Energy in the United States has said that just two laws that have been brought in under the Biden administration will cut greenhouse gas emissions by up to 41% below 2005 levels by 2030 and that what's being done with the IRA will commit that even further. However, Canada's environment commissioner has stated that Canada's target for 2030 is very unrealistic and likely not going to happen, and he mentions, particularly, that it's based on false claims or hopes for hydrogen.

Mr. Moffet, what do you think in terms of the need to actually hit targets? We've missed every single one that has been promised under this government.

Mr. John Moffet: I take issue with your last point. We've missed targets established by previous governments. We haven't missed any target established by this government.

I also think it's important to understand that the United States' economy is starting from a very different place than Canada's. Canada, as my colleagues have emphasized, starts with much more significant clean electricity. While the U.S. has the opportunity to significantly decarbonize by reducing emissions from electricity, we're already at over 80% clean electricity.

We're starting ahead. That's not to say that targets are not important or that meeting our targets is not important. I would just emphasize that the government has a statutory commitment to issue a progress report under the Canadian Net-Zero Emissions Accountability Act this fall, so you'll see all of the government's projections this fall.

Mr. Charlie Angus: I hate to interrupt, but I only have two and a half minutes.

I like the fact that we're starting ahead, but now we're further behind. That worries me.

You said that it was previous governments. I mean, I don't mind beating up on the Harper government all the time, but the fact is that the environment commissioner said that we can't keep going from failure to failure. That's how he has described our missing every single target.

Are you saying that we haven't missed those targets? Which ones?

Mr. John Moffet: I think he's referring to previous targets established by previous governments.

Mr. Charlie Angus: I don't think so.

Mr. John Moffet: This government has a 2030 target.

Mr. Charlie Angus: Do you think we'll get it?

Mr. John Moffet: This government is confident that we'll get there.

Mr. Charlie Angus: Okay.

Thank you.

The Chair: Thank you.

We will now go to Mr. Dreeshen. He has five minutes for his questions.

Mr. Earl Dreeshen: Thank you very much, Mr. Chair.

Just to talk about what Charlie had mentioned, the information we have on climate and energy provisions says, “The Biden Administration has set a goal of reducing U.S. [greenhouse] emissions by 50% to 52% below 2005...by 2030. The provisions in the IRA will not allow the U.S. to achieve its 2030 target, but they are expected to improve on existing policies.” The U.S. doesn't expect that they're going to be able to handle this either. That's from the documentation we had from the library.

One of the other things I want to talk about is the reliable supplier of critical minerals. Yes, we have that as an opportunity. However, we can't even move forward on any types of projects. I'm really going to be interested in seeing how the members of Parliament will deal with that particular issue.

The other part is that you've mentioned how Canada's always been further ahead. I believe Mr. Des Rosiers talked about the U.S. Department of Energy on technology. We used to be the leaders. If we don't get our act together, we're going to end up being the followers. We're going to end up having to buy technology from around the world, because we're not allowing our industry to expand. That's the reason we were able to be this leader.

That's the first part. The other thing is that Fatih Birol from the International Energy Agency indicated the difference between the heavy oil coming out of Alberta and traditional oil and gas, and that the difference in that was equivalent to one day's emissions in China. Does it matter, then, if China catches up on January 1, 2030 or 2040, or on January 2? However, we have managed to demonize the energy that is coming out of Alberta for whatever reason. I haven't quite figured that one out.

The other point that was just mentioned was the brownouts in Alberta. We had two members, one from the NDP and one from the Liberals, attacking the provincial government for talking about.... Let's look at what is really occurring here. The brownouts that occurred came about because of hot weather and low winds. When you have a massive amount of energy, which we do have in Alberta, coming from wind, and you're at less than 1% efficiency because there's no wind, it's no wonder we have some issues, but that also means there are issue with the renewables that we have at present. They can't keep up. We don't have a grid system that can manage it either. The major concern is that no one has sat down and said, “How do we deal with the reclamation that is needed for solar farms and wind farms?” We see what is happening around the world. Those are things that we need to consider too.

As to the comments that came about to attack the Alberta government, all they're doing is being responsible by saying we had better have this figured out, because that cost is going to be massive as well.

Another point that was brought out was about Siemens. I don't know if anybody has figured out what is happening with Siemens in Germany. There are major issues with their windmills and major concerns. In July, I think, of this year, there was a 37% drop in their market share because of the problems they have with windmills.

Do you think it is maybe an important thing to talk about renewables, because for some reason, as I've said many times in this committee...? We have to talk about the energy requirements from the first shovel we use to dig something up to the last shovel we use to cover it up. Until we do that, what are we really talking about in natural resources?

Mr. Des Rosiers, I've pretty well talked through most of my time here, but could you perhaps give us some sense of where we're going to go? We have followed a path. We have done the political thing and looked at people, pointing fingers. We have followed that path. What are we going to do in the future so that we are actually the leaders around the world that we have been for generations?

● (1220)

Mr. Frank Des Rosiers: That was a point that I thought of maybe emphasizing. I like your point about Canada showing that leadership technology-wise. That's been the case for the past so many years.

I must say that we heard earlier from our ISED colleagues about how many of those clean-tech firms are present in the country. There are 2,800 firms that we have reached out to and engaged with. Most of those export their products and services. About 90-plus per cent of their sales are abroad, in the U.S., Europe and beyond. There's a great deal of interest out there for this kind of marketplace and being able to continue to drive ahead and attract the capital and investments we need to supply the market. I'm actually quite optimistic about Canada's prospects in this regard.

The Chair: That's good timing. It's the end of the five minutes.

We'll now go to Mr. Sorbara for the final five minutes of this round.

Mr. Francesco Sorbara (Vaughan—Woodbridge, Lib.): Thank you, Mr. Chair. It's great to see you again.

Welcome to all of my colleagues and to the witnesses.

I'd like to go to Mr. Moffet.

In the last paragraph of your remarks, you reference budget 2023's commitment to improve the efficiency of the federal impact assessment and permitting process for major projects in Canada, which I think is critical for us on the EV supply chain—just to give you an example—or even to move online with further nuclear projects in the province of Ontario and the ones that were announced. I'm not going to go into too much detail there because that would take a long time.

Europe and the United States have both made announcements within, I would say, the last six months to a year on speeding up the processes with regard to permitting, on both the renewable front and the non-renewable front.

Can you give some indication on the $1 billion that we put into the budget to make sure the Impact Assessment Agency is even more effective than it currently is today?

● (1225)

Mr. John Moffet: I can speak to that very briefly, but I'll start by saying that the commitment is not about the Impact Assessment Agency, nor is the commitment about the Impact Assessment Act. The commitment is about permitting. In fact, the majority of projects in Canada, the majority of the investments that we've talked about today, don't go through the impact assessment regime. The Impact Assessment Act has nothing to do with the majority of projects.

However, most projects in Canada are subject to a variety of federal and provincial regulatory requirements and permitting requirements, so the commitment is to try to align and expedite decision-making across that full suite of regulatory and permitting requirements. The focus on the Impact Assessment Act is, in fact, a red herring.

Mr. Francesco Sorbara: First of all, thank you for that clarification. I was hoping you would bring that out.

Second, with regard to what's happening today in North America—and when I define North America, obviously, I mean our largest trading partner and a very large trading partner in Mexico—we have seen a transition going on. At the same time, recently a very successful, very large Canadian energy company, Enbridge Inc., purchased three natural gas companies in the United States—about a $10-billion capital investment, done very successfully through the markets. There's an equity raise and bond financing that accompanied that, which I was reading about over the last few days. It is a North American energy market.

I would like to hear, specifically on natural gas, how our trading partners are viewing that energy source where we had a leading North American, Canadian-based company increase its presence within that sector. Thank you.

You were nodding, Mr. Des Rosiers.

Mr. Frank Des Rosiers: I'll give it a shot.

You can feel free to add, John.

I totally agree that, when we think energy, we have to think.... The motion and the study that you're launching now very much takes that perspective. Taking a North American energy perspective is really the way to look at it, and it's especially true in the case of natural gas, where we see those networks and pipelines being deeply integrated. I would add to this that they've become even more global now thanks to LNG facilities. Canada will be having its own facilities out west where, certainly, the connection on the west coast for Canada with the Asian market or with the U.S. market, where much of the gas is channelled through our infrastructure assets and goes to Europe and beyond.... That kind of connection is now spanning not just the continent but beyond.

Mr. Francesco Sorbara: Thank you.

My final comment is on this two-track trajectory—which is what I call it—where we are seeing substantial investments in the clean energy transition. We see that here in the province of Ontario with announcements on SMRs. With that, there is an energy tax credit—I forget the name—that we provided within budget 2023 and that I applaud significantly. At the same time, there is further growth in the renewable assets, be they solar, wind and so forth, and you're seeing that across the pond.

Right now, my understanding is that 84% of the Canadian electricity grid is clean energy. Is that correct?

Mr. John Moffet: Yes, it's over 80%.

Mr. Francesco Sorbara: By your estimates, what would be the requirement in terms of how large our electricity grid would have to become to meet the increasing demands of the transition to clean electricity products, including EVs?

Mr. John Moffet: I can start.

I think the honest answer is that nobody knows exactly, but we know that demand for electricity is going to increase significantly. My colleague referred to an estimate of the demand doubling. The recent regulatory impact analysis statement that we issued for the clean electricity regulations had a couple of scenarios. One was 1.5 times growth; another was for larger growth. We see estimates from credible third parties ranging from 1.5 times to three times growth.

The answer is that there will be very significant growth across all forms of clean energy over the next few decades—a large lift, as my colleague explained in his opening remarks.

The Chair: We're going to have to end there. That's just over the five-minute mark.

Colleagues, we're at 5:30. We do have some committee business we need to get to. We're slightly ahead of where we wanted to be. I could squeeze out four two-and-a-half-minute rounds. Do you want to do that?

Okay. We'll go first then to Mr. Patzer for two and a half minutes.

● (1230)

Mr. Jeremy Patzer (Cypress Hills—Grasslands, CPC): I'm going to let Shannon take the questions.

Mrs. Shannon Stubbs: Thanks, Chair. If I still have time, I'll throw it back over to Jeremy.

Given the conversations we're having about the requirements to reduce emissions and the competitiveness issues between the U.S. and Canada, I want to mention the importance of the discussion around investment versus production tax credits and the way that governments incent emissions reductions in the U.S.

They have a method that offers a guaranteed price for actual, proven emissions reductions. For Canadians, for the committee members, it would behoove Canadian policy-makers to look at that model versus Canada's, in which layers of different kinds of carbon taxes have simply served to increase the cost of living and to make fuel and food unaffordable, without, it would seem, any relationship whatsoever to actual emissions reductions. That is a topic that I hope this committee will be able to explore with American representatives and others as we go forward.

I do want to ask a question about the SIF program. I understand, of course, the importance of Canada's owning the supply chain in critical mineral production, leading to meeting electrification goals. That's a very high priority that Canadians should address, but I have a question about Woodfibre LNG. That's a groundbreaking project. It will be net zero by 2030. It has an indigenous partner as an environmental regulator. It will be run on renewable electricity by 2027. The application was made to the advancing net zero and indigenous reconciliation part of the fund. It's mind-boggling that it was rejected. Can someone explain why?

Mr. Patrick Hum: I think it would be important that we have a conversation with the company. It's important that we have a conversation to explain where the priorities are for the program and maybe to speak to them about how decisions were made to issue that rejection letter.

The Chair: That's the end of the two and a half minutes.

We'll go now to Ms. Dabrusin who will also have two and a half minutes on the clock.

Ms. Julie Dabrusin: Thank you so much.

My question's really about how Canada can seize the opportunities that are presented by what we see as a worldwide transition to low-carbon products.

I believe it was in your statement, Mr. Des Rosiers, that you mentioned the EU showing a preference for lower-emission products and how they're prioritizing collaboration that drives energy transition and security. Maybe I'll start with you, but anyone else can jump in on that.

What is the EU doing, and how do we make sure that we are seizing those opportunities as we go forward?

Mr. Frank Des Rosiers: I couldn't agree more that opportunities abound. I was at our missions just recently. We heard from our ambassadors in Japan, South Korea, the U.S., Germany, Spain and France. They were all saying how keen those partners are to secure their supply from Canada and our firms. This is one of those rare moments when you have governments and firms alike very much converging because they know that their clients are expecting low carbon to be embedded. When they do make those investment decisions on those billions of dollars of assets, they're very diligent about looking at all stages—from transportation to production to transformation—as to how Canada stacks up in this regard.

All in all, thanks to our clean electricity, thanks to many of the things that play in our favour, we actually stack up quite well. That's part of the reason we have seen so many deals happening lately.

Mr. John Moffet: Can I just elaborate on one point?

Another thing the European Union is doing, of course, is standing up a CBAM, a carbon border adjustment measure. Canada, as in so many areas, is well placed to address that because of our robust system of carbon pricing and regulations.

● (1235)

Ms. Julie Dabrusin: I have only 30 more seconds. On carbon border adjustments, if we do not do what we need to do to transition to a low-carbon economy, what would be the impact of the EU border carbon adjustments on our trade with the EU?

Mr. John Moffet: The CBAM would effectively impose a tariff on any imported products that are not low carbon.

Ms. Julie Dabrusin: Thank you so much.

The Chair: That's the end of that round.

I will go to Mr. Simard, who will have two and a half minutes on his clock.

[*Translation*]

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

I'm very fond of my friend Mr. Dreeshen, as well as Ms. Stubbs, but I would like to come back to something. When it comes to energy transition, there is a first principle: carbon pricing. It must be clearly understood that there are not multiple carbon taxes, but only one, and that doesn't apply to Quebec, which has its own carbon pricing. The other things that are being added are fuel regulations, and I would point out that the Conservative Party has also already introduced fuel regulations. So we can't talk about multiple carbon taxes, because that would be untrue.

I have a quick question for you, Mr. Jovanovic. In your presentation, you said that the clean hydrogen tax credit would vary based on carbon intensity. The minister has often told me that he doesn't want to talk about the colour of hydrogen, be it blue, green or grey, but do you already have tiers to distinguish between hydrogen produced by hydroelectricity and hydrogen produced by oil and gas?

Mr. Miodrag Jovanovic: Yes, the government has announced three levels of credit. For the cleanest hydrogen, there is a 40% credit. Then there's a 25% credit at the intermediate level. Then it drops down to 15%. To qualify for the 15% credit, for example, I believe the hydrogen produced has to have a carbon intensity of between 2.5 and 4 kilograms of carbon equivalent per kilogram. To reach the highest credit rate, I believe the carbon intensity of the hydrogen produced has to be around 0.75 kilograms of carbon equivalent per kilogram. I don't remember exactly, I would have to check.

So basically there are three levels, as opposed to—

Mr. Mario Simard: That's perfect. However, overall, you would think that a hydrogen project produced from gas would be more expensive than a hydrogen project produced from hydroelectricity. Does the tax credit apply to the entire project and the infrastructure needed to produce hydrogen?

Mr. Miodrag Jovanovic: I don't know if it's necessarily more expensive when you do it by—

Mr. Mario Simard: For facilities, yes.

Mr. Miodrag Jovanovic: It depends on the project as a whole. You can have a water electrolysis project to generate green hydrogen that requires a very large investment in wind turbines, for example, or in creating a road system to access all of that. It really depends on the type of investment.

Basically, what determines eligibility for the credit is the equipment directly related to the electrolyzer, in the case of green hydrogen, or the equipment—

Mr. Mario Simard: Will you be able to table the three levels you mentioned to the committee?

Mr. Miodrag Jovanovic: Yes.

[*English*]

The Chair: We need to end it there.

We'll go to Mr. Angus, who will have his last two and a half minutes in this round.

Mr. Charlie Angus: Thank you.

I'm going to turn it over to my colleague, “Mr. Green”.

Voices: Oh, oh!

Mr. Mike Morrice (Kitchener Centre, GP): I'll take it. Thank you, Charlie.

I'll start with something that we can all agree with, which is that we need to go much faster in this energy transition and we're going to need more investment to do that.

Now, for some facts, last year in the oil and gas industry the profits for the five largest companies alone were $38 billion. In the price at the pump for Canadians across the country, the carbon tax went up by two cents last year, and those profits went up 18¢. We know that this government has already put in place a windfall tax on excess profits. They call it the Canada recovery dividend. They did that for banks and insurance companies. The PBO has costed it out. We could raise $4.4 billion to reinvest in proven climate solutions.

I'd like to turn to you, Mr. Jovanovic, for your reflections on what could be done if we were to use that $4.4 billion and invest that in proven climate solutions, whether that's retrofitting homes or transit. Could you reflect on how much quicker we could go if we had a windfall tax on the profits of oil and gas companies in this country?

● (1240)

Mr. Miodrag Jovanovic: Thank you for your question.

I'm not in a position to talk about or speculate on the considerations around introducing a windfall tax on—

Mr. Mike Morrice: Sure. I'm not looking for that. What I'm putting forward is that the PBO has told us that the political decision would raise $4.4 billion.

I'm wondering if others from the finance department could share. If you had another $4.4 billion, where would you invest it to get the lowest-cost emissions reductions right now?

Mr. Miodrag Jovanovic: I'm not sure I have an answer to that question. The government has made substantial investments, as I said, just looking at the five various ITCs covering different aspects of clean technology, but I'm going to turn to you....

Mr. Greg Reade: I'll just mention that the Canada Growth Fund is on the cusp of announcing some deals. It is that arm's-length institution whose job is to do exactly that: to work with the market to find the most cost-effective ways to reduce emissions in the country with the private sector. They are doing that.

The Chair: That's the end of our time.

I'd like to thank all of our witnesses today for coming in and spending the time with us.

We are now going to leave this part of the meeting to move in camera. We'll ask anybody who's not going to be in the in camera portion of the meeting to bid their adieus, gather their papers and make their exits, so that we can conclude our committee business shortly.

We'll suspend for a few minutes.

[*Proceedings continue in camera*]