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# Standing Committee on Natural Resources

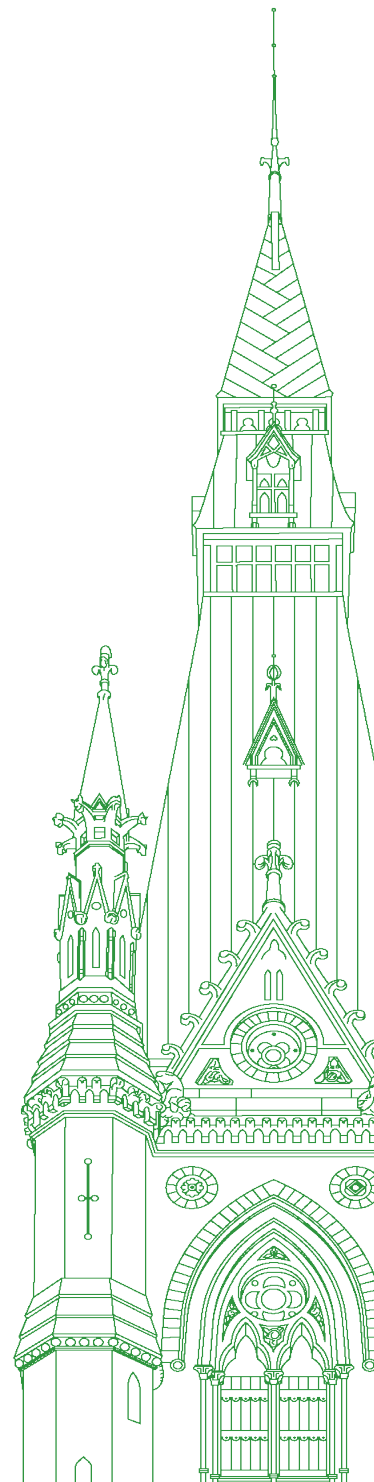
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Chair: Terry Duguid





## Standing Committee on Natural Resources

Thursday, April 16, 2026

• (1535)

[English]

**The Chair (Hon. Terry Duguid (Winnipeg South, Lib.)):** Colleagues, happy Thursday afternoon. I'd like to call this meeting to order.

I'd like to acknowledge, as we always do, that we are on the unceded territory of the Algonquin Anishinabe nation.

Welcome to meeting 32 of the House of Commons Standing Committee on Natural Resources. Today's meeting is taking place in a hybrid format.

I would like to welcome MP Leslie Church to our august committee. Claude just said that it was an upgrade.

We also welcome, as we always do, MP Jonathan Rowe. He's an associate member of the committee, but we see him regularly.

It's always nice to see you, Jonathan.

Let me remind participants of the following points. Before speaking, please wait until I recognize you. For those participating by video conference, click on the microphone icon to activate your mic, and please mute yourself when you are not speaking. For those on Zoom, at the bottom of your screen, you can select the appropriate channel for interpretation: floor, English or French. For those in the room, you can use the earpiece and select the desired channel. I will remind you that all comments should be addressed through the chair.

Pursuant to Standing Order 108(2) and the motion adopted on Thursday, September 18, 2025, the committee shall resume its study of Canadian energy exports.

I would like to welcome our witnesses. From Commodity Context Corporation, we have Rory Johnston, founder; and from Studio.Energy, we have Peter Tertzakian, founder and chief executive officer. All virtual witnesses have conducted a mandatory witness onboarding test.

You will each have five minutes for your opening remarks, after which we will open the floor to questions.

We're going to start with you, Mr. Johnston. You have the floor for five minutes.

**Rory Johnston (Founder, Commodity Context Corp.):** Members of the committee, thank you for taking the time today to discuss the critical topic of Canada's energy export opportunities at the most energy insecure moment, globally, in a generation.

My name is Rory Johnston, and I'm an oil market analyst. My comments today and the expertise I hope to share with the committee relate to the position of Canada within the global oil market and the specific structure of Canada's current oil trade.

Canada is a global energy superpower. We are a top five producer, exporter and reserve holder of oil, but unlike other global energy superpowers, like the United States, Saudi Arabia and Russia, virtually all of our oil exports go to a single market—the United States. Whereas, other energy superpowers sell the bulk of their product to open, and thus optional, seaborne markets, the vast majority of Canada's energy exports go to market via fixed pipelines. In other words, our products are currently locked into specific geographic markets, most notably the U.S. Midwest.

Canada's dependence on pipelines has often resulted in existential crises for the oil and gas industry. When western Canada's production outstrips available pipeline capacity, it can trigger years of wider differentials, in this case the discounts, for Canada's primary heavy crude export blend, Western Canadian Select, or WCS, relative to U.S. benchmark WTI. This discount normally sits between \$10 and \$15 a barrel in Hardisty, Alberta, but indicatively hit an all-time high of roughly \$50 a barrel in late 2018, which prompted the Alberta government to temporarily curtail provincial production in order to reduce competition for increasingly scarce egress.

The availability of ample and reliable egress is the single most important factor underpinning the competitive position and continued success of western Canada's oil and gas industry. Without sufficient egress, we can expect ever-larger discounts borne by Canadian barrels or permanent curtailment of Canada's largest export industry. It's critical to emphasize that the devaluation of Canadian oil exports caused by differential blowouts doesn't apply only to barrels stranded in the basin, but to virtually every barrel produced in western Canada. As such, differential blowouts have an outsized impact on provincial government royalties, investment intentions and ultimately employment in the sector.

There are multiple potential paths of Canadian pipeline expansion. At present, we have the MOU for the west coast oil pipeline, championed by the Alberta government, expansions to the Trans Mountain pipeline system and Enbridge Mainline system, and the most recently floated Bridger expansion pipeline in the United States that would connect to legacy Keystone XL pipeline segments on the Canadian side of the border. Expansions like those proposed on Trans Mountain and Mainline are poised to expand egress capacity by 300,000 to 400,000 barrels a day each, with a cost measured in single-digit billions of dollars. The greenfield pipelines are notably more expensive and complex.

The path of least economic resistance will likely further entrench dependence on the U.S. market. If the prioritization of these expansion opportunities is left entirely to the oil and gas industry alone, there is great potential to favour options that maximize netbacks—typically the capacity with the lowest per-barrel cost—over options that maximize strategic value.

However, the U.S. market is less and less risk-free. For most of the history of Canadian oil industry, the U.S. market seemed like an effective risk-free bet. Our closest ally also happens to be the world's largest oil importer. The U.S. had a growing demand for Canada's heavy sour barrels, and as a result, Canada now accounts for roughly two-thirds of all U.S. crude oil imports.

Now we face the rise of anti-pipeline politics with the Obama and Biden administrations, and more recently and more concerning, the Trump administration's trade war on Canada and previously unthinkable threats to impose tariffs on Canadian oil exports. U.S. refineries hold an effective monopsony on Canadian crude imports. Economic research has shown that, by and large, American businesses and consumers bore the lion's share of tariff incidents across most sectors.

Most firms can pivot the export of goods elsewhere, if prices are better. Unfortunately for Canada's pipeline-dependent oil industry, U.S. refiners can push more of that tariff incidence upstream into Canadian crude pricing. Indeed, this is exactly what happened through the first few months of 2025, right until the White House exempted all USMCA-compliant goods, including oil. There's no separating ourselves from the U.S. market. That ship has sailed. It's largely in Canada's interest to continue supplying U.S. refineries, but Canadian exporters have already largely satiated U.S. refinery demand for Canadian heavy crude. A growing volume of Canadian crude is already being re-exported out of the U.S. gulf coast.

● (1540)

The Trans Mountain expansion project helped crack the door open to new markets. Last year, China overtook the U.S. west coast as the largest buyer of those barrels. Still, the largest tankers cannot load from the Trans Mountain pipeline. This means that the only functional way to service the Indian market, for example, has been to ship on those large VLCC tankers out of the U.S. gulf coast.

Canada can prioritize its own energy security. As the largest net petroleum exporter in the OECD and the western alliance, Canada needs to prioritize its own energy security in terms of both supply and demand. Energy security of supply can only come from a diversity of suppliers. Energy security of demand can only come from a diversity of export markets. If the U.S. ever wants to tariff

our exports again, it would be advantageous for Canada to have export options. This highlights the strategic value of more west coast export pipeline capacity that terminates in a deepwater port and provides full service access to global markets. This capacity will likely require public capital to be realized.

Canada is a global energy superpower. It's time we started thinking and acting like one.

**The Chair:** Thank you, Mr. Johnston.

Now we are going to Mr. Tertzakian.

The floor is yours for five minutes.

**Peter Tertzakian (Founder and Chief Executive Officer, Studio.Energy):** Thank you very much. I'm honoured to present to you, the honourable members of the committee.

I think we can agree that we are in a new era, a very different moment than even a few years ago, if not a few months ago. Our Prime Minister has described the world as entering a period of rupture, a break from an era of rules to one defined by fractured trade, geopolitics, outright economic warfare and the need for resilience through export diversification.

In short, Canada needs new customers who, through our infrastructure, expand trade and strengthen security. Oil and natural gas are central to that push, boosting exports and growing our GDP. Canada has the resources and production base to compete in global markets. In a more fractured world, Canada can also support trusted allies and other middle powers of vital energy resources, as we are seeing in real time.

First, on energy exports, in 2024—the formal numbers—Canada exported \$187 billion in oil and gas, about one-quarter of all Canadian exports. This year, by the way, it will be over \$200 billion. That means oil and gas creates jobs for workers and royalties and taxes for governments. By the way, those royalties and taxes were estimated at \$30 billion in 2025 and will be over \$40 billion in 2026.

This maintains stability for communities across every producing province and every province that supplies inputs to the industry. Being a superpower begins with producing at scale, gaining meaningful market share, selling to a wide and diverse international base and having the infrastructure to reach them from the Pacific Ocean.

My second point is that Canadian energy exports matter, not only to us but to the rest of the world, especially our allies. Oil remains essential not just for road transportation but for petrochemicals, fertilizers, aviation, shipping and heavy industry, to name a few. Natural gas and LNG also matter enormously, especially in Asia, where demand growth is strong.

We've already taken the first steps. TMX has opened up to Asian markets and is now exporting at full capacity. LNG Canada has started exports of LNG from Kitimat, with phase one capacity at about 14 million tonnes per year. Those are just small steps.

On natural gas, Canada remains overly dependent on two buyers—our own domestic market and the United States. If Canada can build towards 50 million tonnes per annum of LNG, we move from being a North American price-taker to being a genuine strategic player in the Pacific Basin.

Oil and gas infrastructure requires pipelines, gathering systems, processing plants, port facilities, storage and others. It also requires upstream investments to fill the pipelines. Our recent work on GDP shows the scale of the impact. Building an extra one and a half million barrels per day of oil capacity and filling it could raise Canada's real GDP by an average of \$31.4 billion per year over the next decade and support an average of 112,000 jobs per year.

Our work also shows the cost and the investment required. To build such an oil pipeline, or series of pipelines, requires about \$40 billion for pipelines only, plus another \$100 billion in upstream investment needed to fill them with the flow of oil. It's safe to say that the infrastructure is expensive. We can do it, but the economic prize is also very large.

My third point is that the barriers to doing all this are very real. We face policy density, regulatory overlap, approval delays, cost inflation and uncertainty about carbon markets and carbon policy. In the LNG space, project proponents in the work we've done describe an unworkable policy environment that creates delays and rising costs, and signals to outside investors that Canada is not fully open for business.

We also face real constraints in determining indigenous rights and land governance, especially in B.C., yet our work also shows that indigenous partnership is not an obstacle. We find that it is a condition for success. Projects that give communities a genuine share and a genuine say are the ones that have the best chance of moving forward.

However, in the absence of regulatory reform, policy clarity and other stakeholder alignment, Canada's oil and natural gas industry will be neither cost-competitive nor able to attract the billions of dollars in investment necessary to expand and diversify.

To conclude, the choice before us is straightforward. We can remain a market that is hostage to the United States, dependent on too few buyers and vulnerable to discounts and delays, or we can take

advantage of the moment. By the way—Mr. Johnston mentioned it, and I'll mention it—the amount that we have forfeited just on oil over the last 15 years as a consequence of being held hostage to the United States is over \$49 billion U.S. That to me, as a Canadian, is unacceptable.

• (1545)

**The Chair:** Thank you, Mr. Tertzakian. Thank you both for that testimony.

We're now going to go to questions and comments. We are going to start with Mrs. Stubbs for six minutes.

**Shannon Stubbs (Lakeland, CPC):** Thanks, Chair.

Thank you to both of our witnesses today for such an eloquent and informed demonstration of the challenges that face Canadian energy security of supply and exports—which directly impact proponents' decisions around production, based on whether or not they have enough infrastructure to export—and, of course, all the benefits for Canadian sovereignty, affordability and self-reliance, as you have articulated.

It is certainly appalling to Conservatives, who have always pushed this same Liberal government to fix the pancaking—because of domestic Canadian policy—of anti-energy legislation, red tape policies and taxes that, as you both articulated, our biggest customer, competitor and now threat, the United States, does not impose upon itself.

Of course, the private sector has issued a number of letters, with an increasing number of signatories among CEOs of all kinds—quite unusual in Canada, actually—with very clear directions to the government to fix the fundamentals, to provide certainty and clarity in legislation and policies, and to have a competitive fiscal investment attraction environment. That way, the private sector can get timely permit approvals and actually know that, on the back end, when they get an approval from the government, they will be able to construct that important energy infrastructure to the benefit of Canada and of North American security and resilience, once they get that green light.

To both of you, thank you for telling the truth. The Trans Mountain expansion—which, as you of course know, in the view of Conservatives should have been built by the private sector proponent, but it couldn't be because of the lack of federal certainty—does primarily feed the American PADDs, which then export from the gulf coast. It is still clear that, more than ever before, dedicated inter-jurisdictional pipelines for export are required for investment to come back to Canada, at the staggering and generational lost levels that you have both identified.

I would just invite you both to comment on what you would see as the top priority issues for certainty and clarity for investors in Canada to pave the way for the private sector to get timely approvals on energy export infrastructure. What do you see as the main gaps that definitely must be closed in Canada to make us competitive with the United States, and, most importantly, to expand our export markets well beyond that customer, competitor and, now, major trade threat?

I'll go to Rory first, and then Peter after.

**Rory Johnston:** Thank you for your question.

I think the one thing I would differentiate slightly is.... I completely agree, and I'm not at all going to defend the past decade of regulatory encroachment in this country, which has limited the attractiveness of investment in this patch. The one thing I would caution, however, is that....

In my comments, I mentioned that the oil and gas industry, the private sector by itself, is always going to pursue the lowest-cost and lowest-risk avenue for exports. In some ways, I think it's often laid at the feet of government that the reason we have so much dependence on the U.S. market is that it was an active choice by the government or something like that.

I think in some ways it's actually that if we look at some of the major generational-moving infrastructure projects in this country—whether it was the trans-Canada railway, TC Energy's Mainline or the C.D. Howe natural gas project—these were, in many ways, done differently from how the private sector would have done them. In both cases, you had outrage from industry, “Why wouldn't this go through Chicago? Why would you ever build a railway that doesn't go through the rail hub of North America?” I think that, at the time, Sir John A. Macdonald was arguing that we needed to keep this within our borders. We needed to have sovereignty over this—

• (1550)

**Shannon Stubbs:** Rory, I appreciate this, but of course I was elected for the last 11 years with this same government.... In fact, this government outright vetoed an approved interjurisdictional pipeline for exports to the Pacific, instead of taking the court option, which was to redo the indigenous consultation to get that right and to let the private sector build it. They also refused to declare the Trans Mountain expansion to be a general advantage to Canada, which would have helped provide federal jurisdiction so the proponent could go ahead and get that pipeline built. Not a single taxpayer cent should have had to be spent on it.

On top of all of that, there was a private sector proposal for a west-east pipeline to then also be able to provide western supply to

eastern refineries and export to Europe. However, that was deliberately killed by the government—through regulatory red tape, moving the goalposts and uncertainty—to force the proponent to abandon it because of domestic politics in the middle of the country.

Thank you for your answer so far.

Mr. Tertzakian, I wonder whether you might want to expand on the question that I asked, which was about the top priority: providing certainty and clarity for investors in Canada to expand oil and gas production and exports for Canadian self-sufficiency and to supply our allies. Would you mind commenting on that, particularly in terms of the competitiveness with the United States?

**Peter Tertzakian:** It's a great question. First of all, it's clarity and certainty. A permit should be a permit and should not, once granted, be subject to being shredded and discarded, which is what has happened repeatedly with many of the pipelines.

Second is the time value of money, which all investors will look at when thinking about building a pipeline. We need to shorten the process of permitting substantially—from many years down to less than one or two years. This is where the competition is at in other jurisdictions in the world, including the United States.

When investors look at their global portfolio and ask where they are going to put their money, they want the certainty that when a permit is granted, it's real and they can get it in a reasonable amount of time, because of the time value of money.

**The Chair:** Thank you.

Mr. Clark, we're going to go to you for six minutes.

**Braedon Clark (Sackville—Bedford—Preston, Lib.):** Thank you to our witnesses for being here today and for your very thoughtful opening statements, which I think did a very good job assessing this situation as it exists today.

In the time I have today, I would like to talk a bit about where we can go in the future and how we can improve the energy situation of the country. I think that's the essence of this study and the point of what we want to achieve.

Both of you talked quite a bit—as I say, accurately—about our over-dependence on the U.S. and the complications that this has obviously caused currently. Then there are overlapping regulatory issues as well, which I think was also well said. As I'm sure you know, the federal government is in the midst of working on harmonizing environmental assessment procedures and processes with all provinces and territories. In my home province of Nova Scotia, that was signed a couple of weeks ago. There are many other provinces that have done that.

Mr. Johnston, you can go first and then Mr. Tertzakian can go afterward.

What are your thoughts on that process in particular? Perhaps complementary to that, what are your thoughts on Bill C-5, which is the major projects act, and on how those two things can be complementary to get these projects moving to diversify our options?

**Rory Johnston:** I want to reiterate what Peter was saying in the last question as well. Fewer approvals, less permitting and faster permitting will all help the process and allow, particularly to Peter's point, the upstream investment to fill these pipelines and get this product produced in the first place, to the point that we don't even need to worry about where we're actually selling it to.

That said, I will defer to Peter on some of the specifics around Bill C-5 and some of the specifics of Canadian domestic regulatory policy, given that my focus is more on the actual market structure and export patterns.

• (1555)

**Peter Tertzakian:** By the way, it's not just an issue with the United States. We have to be globally competitive as we enter more into global markets. We are not just going to be competing with the United States. We're going to be competing, from an investor's perspective, with a global portfolio of opportunities. The imperative is not just to diversify away continentally but to be competitive globally. The good news is that we can do it, but one of the major impediments, as we've been talking about, is the regulatory pancaking, both federal and provincial, and so on.

Bill C-5 is incredibly important. I personally was very heartened by the introduction of Bill C-5 and the institutionalization of the Major Projects Office. We await to hear how they will, hopefully, streamline and improve these processes so that we can send the proper signals to international investors to come and invest.

One more point is that, as an example, the last time one and a half million barrels per day of incremental oil capacity was built was about 15 years ago. The \$180 billion or \$200 billion that was required largely came from international multinationals, sovereign wealth funds and other places. These are the same places that we will need to tap into. Mr. Carney and his ministers have been travelling the world cultivating interest, but when the interested parties come here, they need to look under the hood and see that all of our processes and our competitiveness are aligned with their global strategic intent.

**Braedon Clark:** I think those are excellent points from both you. As someone who is obviously serving federally now but who has also served provincially, I've seen both sides of that coin.

There's no doubt that there are lots of areas where we need to streamline those processes.

To your point, Peter, I too hope we will see major progress on this in the next few months and next couple of years.

I have one question I want to ask you, Mr. Johnston. I think you mentioned this near the end of your opening statement, but I want to get your thoughts.

Correct me if I'm wrong, but I think you mentioned that in your view, any new energy infrastructure—perhaps you were referring specifically to pipelines—would require some level of public capital. Why is that, if I have it right?

**Rory Johnston:** To clarify, I was specifically talking about the northwest coast pipeline being championed by the Alberta government. The only reason I say that is.... There are two factors.

One, our current track record on building west coast pipeline capacity is very mixed and very expensive. Even the Trans Mountain pipeline, as it currently exists in its expanded form, is not covering the full cost of construction with tolls. If the tolls were to cover the full cost of construction, they would be distortionary and ruinous to the overall structural value of western Canadian oil production in barrels. The same thing would happen, I think, if you structurally acquired a new million-barrels-a-day pipeline capacity to the west coast. It would cost \$30 billion or \$40 billion.

My point is, mostly, that the competing egress that is largely southbound, the Enbridge Mainline expansion pipeline, is going to be notably cheaper. For many of the reasons Peter discussed, it's easier to build pipelines and this stuff in the United States. This is why, historically, so much of our oil export, structurally, has gone there.

There is a tendency to say, "That's our mistake." However, it's economics. It's the gravity theory of trade. It makes a lot of sense, but it has introduced vulnerabilities and precarities into our system. From a strategic perspective, we want diversity, but the economics naturally concentrate. It made a lot of sense, for a long time, for our exports to do that, but it has introduced vulnerabilities that we now have to deal with and that were brought home to bear last year, harshly.

**Braedon Clark:** Thank you.

**The Chair:** Thank you, both.

[Translation]

Mr. Simard, go ahead for six minutes.

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

I find these discussions very interesting. I've long wanted to hear someone say that infrastructure is not profitable simply through its use. Mr. Johnston, I don't think I'm putting words in your mouth, since that's what you said. It seems to me that one of the fundamental principles of capitalism is to invest one's money in something that's profitable.

For a long time, I've had the impression that the reason oil and gas companies don't want to invest in infrastructure is that it's not profitable for them. Without public money, it's not profitable. That's my understanding of the Trans Mountain pipeline. People are not paying the true cost of use. We fund it collectively to the tune of \$7 per barrel. If I understand what you meant earlier, without public money, no oil and gas infrastructure will be built.

Is that what I understand from your last exchange with my colleague, Mr. Johnston?

• (1600)

[English]

**Rory Johnston:** I should specify that this is only for the north-west coastal pipeline. The million-barrels-a-day bitumen pipeline currently being championed by the Alberta government is to the west coast. All other major oil pipelines—for instance, the Enbridge Mainline, original Trans Mountain and Keystone XL pipelines—have all been privately constructed and continue to make good money. These are companies that make good profits. The rest of the upstream sector obviously makes a lot of money from this and further contributes to the public coffers through royalties and taxes.

I should also say this, for instance: Trans Mountain may not be paying its full freight through tolls, but there would be a cost to the overall public purse if those tolls were charged because, again, the differential borne by that marginal barrel—if it were clearing on the Trans Mountain line at a deleteriously high toll—would devalue the rest of the barrels in the basin, which would then erode royalty revenues, etc.

Essentially, the argument—or at least my argument—is that it makes sense to have a subsidized, marginal west coast strategic egress cost in order to keep overall basin pricing strong so producers can continue to contribute to public coffers through royalties and taxes.

[Translation]

**Mario Simard:** To summarize in my own words, this infrastructure does not pay for itself in the long term.

I'll take you in a different direction, gentlemen, but maybe we can come back to this.

In both of your presentations, you said that, in a way, we were captive to the U.S. market, and that's a major problem or stumbling block for Canadian oil production.

However, there's one thing I'd like to understand. When I look at the ownership structure of the biggest players in the oil sector, I realize that they are mostly American-owned. What interest would oil-producing companies, especially those with an American ownership structure, have in diversifying their market? I think that it's perfectly natural for them to send their oil to American refineries.

Isn't there something incongruous about this, given that the entire ownership structure of the major players in the oil sector is American? Are we going to force them to export to other markets? In and of itself, it's already a problem to know that the major players in Canada's oil sector are mainly owned by American interests. Does that not concern you?

[English]

**Rory Johnston:** Do you want me to answer, or do you want Peter to answer?

[Translation]

**Mario Simard:** Both of you can answer; I'm being generous.

[English]

**Rory Johnston:** Okay. I'll say something very quickly and then I'll turn over the floor to Peter.

On ownership structure and equity, obviously the U.S. capital markets are vast and many of our companies are listed on American stock exchanges. In terms of the equity ownership, it's to be expected that they would be owned by Americans to some degree. However, to go back to the point of royalties, I will stress that those are always going to be charged, because this Alberta citizens' constitutional resource is going to be monetized on the behalf of Albertans. That's where the royalties come in.

Also, with ample west coast export capacity, particularly right now when there are insanely high prices in Asia for crude oil, even if you take the assumption that American ownership affects their decision-making at all—which I would dispute heavily—companies are going to follow the highest prices. Those, right now, would be in Asia, so I do think that they would be maximizing exports out of those pipeline capacities.

• (1605)

**Peter Tertzakian:** First of all, I would like to challenge the idea that even Trans Mountain is not profitable. Over what time period are we talking? There are many measures of profit—

[Translation]

**Mario Simard:** I would point you to an analysis that was done—

[English]

**Peter Tertzakian:** This is not a correct assumption.

[Translation]

**Mario Simard:** I would point you to an analysis that was done by the—

[English]

**The Chair:** Colleagues, let's speak one at a time.

Mr. Simard has the floor. It is his time.

[Translation]

**Mario Simard:** This is an analysis done by the Parliamentary Budget Officer. The analysis states that, over 40 years, we will not be able to recoup the costs of Trans Mountain. Not only that, but we also have to collectively subsidize, with public money, the barrels that pass through Trans Mountain—if memory serves, we subsidize them to the tune of \$7 per barrel. Therefore, users are not paying the true cost of using the infrastructure.

I absolve myself by saying that this is not political; it comes from the Parliamentary Budget Officer.

[English]

**The Chair:** We're at time, but I'll give Mr. Tertzakian a chance to respond.

**Peter Tertzakian:** I think when we talk about who is extracting the value—we'll call it profitability—from Canada's resources, the resources that we own, I would suggest to you that the people who are extracting it are the refiners in the United States. We can demonstrate that \$49 billion was forfeited in discounts to the benefit of American refiners. These numbers are not accounted in this Trans Mountain analysis, nor should we assume that the next pipeline that is built is going to be unprofitable. I think these are not correct assumptions.

Finally, what is the cost that is not just dollars and cents in this new world? That value is not—

[Translation]

**Mario Simard:** I would just encourage you to submit your intended answer in writing.

[English]

**The Chair:** Thank you, Mr. Tertzakian.

There's another round, Mr. Simard, and we can come back to you.

We're going to go on to our second round. We're going to start with Mr. Malette for five minutes.

**Gaétan Malette (Kapuskaing—Timmins—Mushkegowuk, CPC):** Thank you, Mr. Chair.

My question is for Mr. Tertzakian.

You mentioned that in 2025, the return in royalties and taxes to Canadian citizens was \$30 billion. You've mentioned that there's an estimate that the return to Canadian citizens will be \$40 billion in 2026. You also mentioned that Canada could be a world strategic player in the future.

Thinking of this, the question at the end is what the number could be, the return in royalties and taxes to Canadian citizens, when we have the pipelines we need and when we start taking oil from offshore, from Newfoundland and the Maritimes? What could the benefits be to Canadians in the long term, in billions of dollars?

**Peter Tertzakian:** I don't have the exact numbers, but I can give you a rough estimate.

The \$30 billion in 2025 is based on an oil price of \$60 per barrel. Probably between \$60 and \$65 is, in only my opinion, the long-

term price that we would probably look at. By growing another million and a half barrels per day, you can linearly extrapolate what this means on top of already producing and exporting five million to six million barrels per day. I'm comfortable saying that the incremental take, because it is commodity-price dependant, at \$65 per barrel would probably easily be another \$10 billion per year.

**Gaétan Malette:** It's an increase of \$10 billion per year.

**Peter Tertzakian:** I'm doing the calculations very roughly in my head, but this is not an unrealistic expectation.

• (1610)

**Gaétan Malette:** Thank you. I didn't expect that. That's a great answer and definitely a great benefit to Canadian citizens.

It's very interesting. Could you explain a little bit more how the Trans Mountain pipeline, in time, will bring back some revenues to Canadian citizens?

**Peter Tertzakian:** It already is. I don't have the cash flow numbers handy, but it's fully utilized and is already making a return back to Canadian citizens.

I should point out that most energy infrastructure in the world and even in this country is state-owned, whether it's our power lines with Hydro-Québec and Ontario Hydro or pipelines in other countries. We should be happy that Trans Mountain is a vital piece of infrastructure that we own. As a Canadian, I am happy that it is not in the hands of foreign countries as it was before Canada bought it.

The question is this. How do we leverage off of a state-owned, vital piece of infrastructure, expand it to the benefit of all Canadians and help our allies and others in the world who are looking for safe, reliable and even, ultimately, low-carbon barrels of oil?

**Gaétan Malette:** Thank you.

Mr. Johnston, I was seeing your body language when Mr. Tertzakian was talking of the return. Maybe you can add to that a little bit.

Also, what steps can be taken immediately to begin developing our resources in pipelines and offshore drilling in Nova Scotia, where they have extraordinary reserves?

**Rory Johnston:** Could you repeat the first part of that question? I wasn't clear on that part.

**Gaétan Malette:** I was hoping you would add a few billion dollars to the royalties and taxes.

**Voices:** Oh, oh!

**Rory Johnston:** Sure. I'll add a few more on there.

To double down on what Peter was saying, the other important aspect here is that overall volume matters. As Peter noted, these are commodity-price dependant. There are going to be periods when commodity prices are lower and this narrative changes dramatically. There are going to be periods when oil prices are much higher, like right now, when we have roughly \$100 a barrel and potentially much higher, should this crisis persist.

One aspect here is that a lot of the value generated or lost in the commodity market happens in these episodic crisis periods. In 2018, when we had differentials blow out to \$50 a barrel, if that held for a period of time, if curtailment wasn't imposed, those differentials would have very quickly paid for many additional equivalent pipelines. Similarly, having the capacity to capture and compete in moments like right now, when we have insanely high prices around the world, would benefit us more if we were able to directly export to Asian markets.

**The Chair:** Thank you very much, Mr. Johnston.

Thank you, Mr. Malette.

Mr. Hogan, you're up for five minutes.

**Corey Hogan (Calgary Confederation, Lib.):** Thank you, Chair.

Mr. Johnston and Mr. Tertzakian, I want to thank you both for being here. We have many good panels, but I like to say that it's not a great panel without a Calgarian.

Peter, you're a Calgarian. Rory, you're an honorary Calgarian in my books. Look at us go. It's a great panel today.

I think we're going to be in violent agreement about the need to diversify away from the United States, the need to move faster and the need to improve regulatory processes, as the Prime Minister has said. On that, I want to flag that the Major Projects Office work is, in some ways, to bootstrap that—to, of course, be a mechanism that we can use now as we take regulatory learnings into the system as a whole so that the entire system can move faster.

Mr. Johnston, I want to talk a bit about the gravity theory of trade. This is a question I've asked many witnesses over the course of this particular study.

Economics concentrates, and it is strategic to diversify. Economic security and nation building are reasons Canada and Canadians would want to diversify, but those are not reasons that the market should have to pay for, frankly. How do we do it with minimal market distortion or, where distortions are, so that those distortions, when necessary, are “fair” and don't favour one party over another?

What advice do you have, as we think about exports, about where we can take such steps?

**Rory Johnston:** I would generally agree that we're going to be in violent agreement on these points. I think that when you think about, again, juxtaposing the west coast oil pipeline, which is a large west coast-oriented pipeline that terminates, by definition, in a deepwater port—which is important in this context because right now, to again reiterate from my initial comments....

Energy Minister Hodgson was at India Energy Week—I want to say that was two months ago now—and he was flagging the impor-

tance of the Indian oil trade. Unfortunately, we cannot service that oil trade from our own ports. We need to use VLCCs that are down Louisiana way. That seems like a strategic shame to me. In terms of the west coast pipeline, I think it would be fantastic if there were a circumstance where, given all the regulatory easing, all the things that Peter so eloquently stated came to pass and we could build a pipeline that was perfectly competitive with a southbound pipeline. I would love that.

I am not especially optimistic that, even with policy change, that's going to happen immediately, and we need to do this quickly. How does this happen? I think it comes down to government policy and making this a critical priority of the government, both in Ottawa and—I would argue as well—in Edmonton. That will likely involve some kind of concessionary capital.

There are many ways that this could be structured. However, at the end of the day, I think it would be beneficial to have both public.... As Peter stated, public ownership of infrastructure, energy infrastructure in particular, is the norm the world over. North America is rare in the fact that we don't do it as often. I think—whether or not it would be Edmonton or Ottawa having concessionary capital in the project—that's one way of going about that.

The main purpose is getting the pipeline built in a fast way that potentially would not require lining up all of the shipper commitments as you would need to do on a fully private pipeline. I think you have a background in pipeline construction. That would be something that's going to take a long time, particularly with competing options—to secure the sufficient number of demand and off-take and shipping commitments to get that pipeline de-risked.

I don't think we should wait that long. I think that we should start building it much sooner. That is essentially the long and the short of it. We need to build this thing faster, and the only way we're going to do that is with a government push.

● (1615)

**Corey Hogan:** As you said and as I said, we're in violent agreement on many of these points.

I worked for the Government of Alberta in 2018 when WCS went negative. Yes, there were massive economic consequences, not just for Alberta but also for Canada. I think back on those days, and I think that in some ways it was a bit of the tragedy of the commons and that in some ways the Trans Mountain pipeline allowed us to, as a government, make sure that the overall system was working. Of course, we don't want to be public owners of pipelines. We don't want to be publicly investing if it at all can be avoided.

As Mr. Simard suggested, if you have any written suggestions in terms of the levers that might be available for government to incentivize and push people towards those, we would love to take stock of those as a committee.

**The Chair:** Thank you, Mr. Hogan. That is your time.

We will now move on to Monsieur Simard for two and a half minutes.

[Translation]

**Mario Simard:** Thank you very much, Mr. Chair.

Gentlemen, I appreciated the discussion on public ownership of infrastructure. We have that in Quebec with Hydro-Québec, but the profits also come back to us, which is a significant detail.

Mr. Tertzakian, I asked you a question earlier and may have been a bit abrupt, as I didn't give you time to answer it. However, as Mr. Hogan rightly pointed out, if you have more information to give us on the profitability of this infrastructure, you can do so in writing. That could make our work easier.

Gentlemen, I'll ask you a very simple question. There's no catch here. In your opinion, in the short or medium term, is it possible to build pipeline infrastructure without using public money?

[English]

**Peter Tertzakian:** Absolutely. We are seeing countries and their state-owned capital wanting Canadian resources—and not just oil and gas—because of the current world situation. This is not new in Canada. Most of our energy infrastructure—certainly with oil and gas—has been built by using foreign multinational capital, and then we benefit as Canadians from the royalties and taxes.

[Translation]

**Mario Simard:** Thank you very much.

Mr. Johnston, what are your thoughts?

[English]

**Rory Johnston:** Again, to echo Peter's points, absolutely, I think to the point of even pipeline capacity, yes. In the private sector, Enbridge will be expanding Mainline. Trans Mountain Corporation will be expanding Trans Mountain. That will not require the allocation of government money. It's the same with the Bridger pipeline.

[Translation]

**Mario Simard:** I don't quite understand the comments made during the last discussion on public infrastructure, but I accept your answer.

I want to discuss price volatility with you. I want to understand it better.

As you know, prices are currently very high because of the geopolitical context. Sometimes, people tell us that China is making very rapid progress in the electrification of transportation because it wants to reduce its dependence on oil. If China becomes a more moderate consumer of oil, that frees up space on the market. Inevitably, that must lead to lower prices. I assume that the major oil companies have enough actuaries to take all these factors into account.

Doesn't that make infrastructure development and long-term profitability—that is, over 40 or even 50 years—more difficult?

● (1620)

[English]

**The Chair:** That's time, gentlemen, but I'll allow a quick answer from each of you.

**Peter Tertzakian:** The quick answer is that oil is not just used in vehicles. It's used in all sorts of other products, including most of what you're wearing and what you see around the room.

**Rory Johnston:** While it is true that China has pushed hard on electrification and other energy transition patterns, oil demand has slowed. In terms of oil demand growth, it has slowed globally, but it is still steadily growing and is expected to continue growing. As long as demand continues to grow, we need to grow supply to meet it.

**The Chair:** We will now go to Mr. Rowe for five minutes and end with Ms. Church.

Mr. Rowe.

**Jonathan Rowe (Terra Nova—The Peninsulas, CPC):** Thank you. I have a lot of questions to ask today, with some small questions going through a long journey here.

You know, in 2008 a barrel of oil was \$147, yet the price at the pumps in 2008 in St. John's, Newfoundland, was at a little over \$1.20. Today the barrel is only \$90. Although that's high, the pumps in St. John's are at over \$1.90. Where is the money being made? Where are the profits going? I assume it's the refineries that are making a lot of profit.

I don't know if you might be able to answer that for me, Peter, just very quickly.

**Peter Tertzakian:** I'm not a retail gasoline expert. I'm an upstream expert. Maybe I'll turn it over to Rory.

**Rory Johnston:** Thank you, Peter.

While I do not know much about the specific jurisdiction you're talking about, in general I think the important thing to note is that three major things drive Canadian pump prices. You have crude oil, which is obvious, as you noted. There are the refining margins, which are higher now than they were then. Part of this is going to the refining sector. I should note, though, that this is not excess profitability, per se. Gasoline, like crude oil, is its own commodity market that's driven by its own supply and demand balances. The relative value of gasoline in the world as a traded commodity drives what we call a crack spread or refining margin.

**Jonathan Rowe:** Yes, exactly. I just—

**Rory Johnston:** If I can keep going, the final piece of this, going right to the core of this conversation, particularly to many of Peter's points about foreign capital coming in and investing in the oil sands in particular, is the Canadian dollar. Right now the Canadian dollar is weaker than it has historically been when oil prices have been this high. There are a bunch of reasons driving that, but one of the major factors is less external foreign direct investment coming into the country and essentially bidding up the value of the dollar.

Historically, that provided a shield to Canadian consumers. Unfortunately, we've lost that shield. Now we are far more exposed to the buffeting of global commodity markets.

**Jonathan Rowe:** Exactly. If I remember correctly, the Premier of Alberta said that the Americans take our oil, refine it and sell it for three times more into global markets than what we do here in Canada. To me, that proves the need for an east-west pipeline, as we mentioned here today already, to export overseas and export to other markets.

Do you think we should be doing more of that processing here in Canada to get the profits out of the hands of the Americans?

**Rory Johnston:** I will take another stab at this one. The energy east pipeline, as it was then known.... Essentially, each pipeline achieved something different. I look at the west coast pipeline as securing security of demand. I look at the east coast pipeline as securing security of supply.

Right now, for instance, during that tariff battle and the trade war last year, there were open worries about whether or not barrels that transited through Chicago on the main line would be subject to some kind of tariff when going back into Ontario. From the exact same point about the TC Energy Mainline, which didn't go through Chicago, we wouldn't have to worry about that if we had an all-Canadian pipeline going east. The challenge, of course, is once again price and cost. That's a very long way for a pipeline to go. I think this is part of the challenge as well.

We have to make choices. Are we managing and prioritizing domestic energy security of supply, or are we trying to expand our export markets and make the most money we can as a country? If it's the latter, I would say the west coast is the priority. We can do more than one thing, but I do think it's important to have priorities.

• (1625)

**Jonathan Rowe:** Perfect. I'm going to ask questions that are closer to home. Our province used to have a refinery. It was 5% of our GDP. It was doing 135 barrels of traditional oil a day. It's now doing a 10th of that doing biodiesel.

I'm having a hard time understanding the biodiesel industry. It seems that the only way to make it profitable is with tax credits. If the U.S., Europe and Canada decided they wanted to tighten their fiscal belts and reduce inflation by having smaller budgets and cut the tax credits for biodiesel, could that market survive? Isn't that opening ourselves up to more geopolitical risk, by investing close to \$100 million into refineries reliant on tax credits, oftentimes of other foreign nations?

**Rory Johnston:** Do you have any thoughts on that, Peter?

**Peter Tertzakian:** My thought is that if you're asking a broader question, whether Canada needs to be more energy-secure, the answer is yes, particularly in central Canada and eastern Canada. We are actually in a very precarious situation even right at this moment, depending on what happens in the Middle East. We could ourselves, in central and eastern Canada, be short of petroleum products.

**The Chair:** Thank you, Mr. Rowe.

Thank you, witnesses.

Finally, we are going to go to Ms. Church for five minutes.

**Leslie Church (Toronto—St. Paul's, Lib.):** Thank you very much, Mr. Chair. It's a pleasure to be here.

My question may be taking us in a slightly different direction. We've talked a lot this afternoon about some of the preconditions for building major projects: investment, shippers' contracts, indigenous engagement, which you raised, Mr. Tertzakian.

What else do we need to be thinking about? The reason I ask the question is that a lot of the work that I do and engage with actually turns around employment, labour and the pipeline of talent, but also around other incentives for investment and growth or the work that we're doing with provinces to ensure that there is one project, one review.

I'll turn to you first, Peter, and then to you, Rory. Can you give us a bit of a picture? If you were offering advice to us, what are the next one or two things that we need to be thinking about if we really want to accelerate and advance these sorts of major projects?

**Peter Tertzakian:** That's a great question, and as a proud Canadian, what I would like to see is the harmonization of Canadian and provincial regulations to reduce what Rory called the pancaking or the layering, and also the reduction of interprovincial barriers—and I know your government is working on this. These investment dollars are huge, and there's no reason why all Canadian provinces can't participate in providing the inputs that are required. An example is steel. Why would we go outside Canada to get steel if we can get it domestically from other provinces or other inputs? That would also enhance our GDP tremendously, our prosperity and our jobs.

We need greater harmonization among provinces and among the provinces and the federal government.

**Rory Johnston:** I would just add that this sector, over the course of my career, has grown ever more politicized. That is understandable, given the stakes, but it is also unhelpful. I would say that when the industry becomes a partisan football, when regulatory policy and even just general disposition towards the industry becomes partisan, that's damaging to the long-term health of the industry. I think it's one of those risks that's very difficult to hedge or ensure for industry, because you're never sure when the next political wind is going to blow.

My dream would be to see that we can have an industry that is supported by all parties in Canada, for the benefit of all Canadians, travelling on Canadian infrastructure to every part of the world, maximizing our value and supporting our allies. In moments like right now, when we have, again, the largest oil supply shock in history in the Middle East with the Strait of Hormuz closed, we should be able to provide assistance to our Asian allies without having to go through the U.S. gulf coast.

**Leslie Church:** Peter, you mentioned in your last answer to my colleague across the table here the need for us to really think about Canada's energy security. I'd be interested in hearing again from both of you on this: What is the makeup in your mind of that energy security portfolio?

Oil and gas is a piece of this, but there are others, especially when we think about this from a national coast-to-coast-to-coast perspective. It can look different in different parts of the country. What does that mean to you in terms of the actual portfolio that would help us be energy-secure broadly?

• (1630)

**Peter Tertzakian:** There are many primary sources of energy that go into all sorts of functions across the economy, including electricity, but oil and natural gas are vital to many sectors of the economy, and not just for transportation.

When it comes to oil and natural gas, we are not energy-secure, despite the fact that we are the fourth- or fifth-largest producer of oil and gas in the world. Anyone looking at Canada from the outside would say that's absurd. It's absurd, as I said before and I truly believe, that eastern and central Canada are in a precarious position right now in the event that the Strait of Hormuz rekindles the conflict. It's a very dangerous situation.

We saw this in 1973 and in 1979. We had rationing coupons that were ready to go and printed by the Government of Canada. Do we

want to go there again? What have we learned in 50 years? The answer is, in my opinion, nothing—to be blunt.

This is our opportunity to think about ways, and it doesn't necessarily mean building a very expensive pipeline from west to east. There are other ways of doing it, but it starts by acknowledging that we want to be much more resilient and secure, not only domestically but also as we think about export diversification and being resilient to economic coercion and economic warfare by our southern neighbours and others.

**The Chair:** That is your time, Ms. Church.

That was a very strong ending, Mr. Tertzakian.

Colleagues, I think you'll agree that was a very stimulating panel. Let me, on your behalf, thank our witnesses.

As was mentioned, we welcome briefs, so if there's information you'd like to forward to the committee, it would be welcome.

I don't often do this, but I'm going to recommend a podcast by Mr. Tertzakian, ARC Energy Ideas. I think it's weekly.

**Peter Tertzakian:** Yes.

**The Chair:** It is excellent and you have a good partner, whose name I can't remember right now.

**Peter Tertzakian:** It's Jackie Forrest.

**The Chair:** You and Jackie Forrest give a nice snapshot of what's going on in the energy sector, and I highly recommend it.

Colleagues, with that, we are going to break for our next panel. Again, I thank the witnesses on your behalf.

Thank you very much.

• (1630)

(Pause)

• (1640)

**The Chair:** We're back in session, colleagues. Welcome back. We'll resume the meeting.

I would like to welcome our witnesses for this panel.

From the Canadian Hydrogen Association, we have David Billedeau, president and chief executive officer. From Hydro-Québec, we have Serge Abergel, chief operating officer, Hydro-Québec Energy Services (U.S.) Inc., and David Laureti, adviser, government affairs.

All witnesses appearing virtually have conducted a mandatory witness onboarding test.

My apologies for the delay, colleagues. We did have a bit of a challenge with one of our headsets, but we're ready to go now.

Let me make a few comments for the benefit of the new witnesses.

Please wait until I recognize you by name before speaking. I remind you that all comments should be addressed through the chair. You will each have five minutes for your opening remarks, after which we will open the floor for questions and comments.

Mr. Billedeau, we're going to start with you. You have the floor for five minutes.

**David Billedeau (President and Chief Executive Officer, Canadian Hydrogen Association):** Mr. Chair and members of the committee, thank you for the opportunity to appear today.

As noted, my name is David Billedeau. I'm the president and CEO of the Canadian Hydrogen Association, which is the national industry association representing the full hydrogen value chain here in Canada. Our members span producers, technology developers, infrastructure providers, post-secondary institutions and end-users. Our focus is straightforward: building a competitive, investable hydrogen sector in Canada.

To start, let me calibrate expectations. Hydrogen is not yet a mature commodity market globally, but it is an emerging one. Demand is forming rapidly, and timing is critical. Countries that align production, infrastructure and policy with real buyers now will capture these markets, and importantly, these opportunities will not wait.

I think two markets matter most today: Europe, and Germany in particular; and the Asia-Pacific region, namely Japan and Korea.

In Europe, demand is being actively built for hydrogen. Germany's H2Global mechanism is securing a long-term, low-carbon fuel supply through a contracts-for-difference system backed by over 200 million euros in state aid for hydrogen imports from Canada.

Meanwhile, in the Asia-Pacific region, Japan is preparing to operate a 40,000-cubic-metre liquefied hydrogen tanker by 2030, reflecting import demand at scale. Korea, meanwhile, has expressed interest in building hydrogen corridors here in Canada, linking hydrogen production with refuelling, mobility infrastructure and transport via ammonia.

For Canada, this creates a genuine export opportunity, but only if we produce at scale competitively. To be clear, we don't face a shortage of hydrogen project proposals. We're facing a shortage of projects reaching final investment decision. That comes down to economics and policy design.

The clean hydrogen investment tax credit, or CHITC, is central to addressing this. The issue is not whether the credit exists, but whether it's truly workable for real projects. We believe that targeted refinements to the CHITC would unlock private capital and accelerate hydrogen development. I'll be happy to provide the committee with a copy of our full technical CHITC recommendations after the discussion, but done right, optimizing the CHITC could help unlock over \$35 billion in private capital by the early 2030s, all within the existing CHITC funding envelope.

I also want to be clear that Canada's hydrogen sector is already operating in global markets. Canadian hydrogen and fuel cell technologies are currently being exported to nearly 50 countries worldwide. For both Canadian hydrogen and technology exports, I believe we have a very strong foundation, but success in scaling now

depends on coordination and focus. To fully seize Canada's export opportunity here, I would highlight three recommendations for consideration.

First, as I mentioned, optimize the CHITC to ensure production can scale across regions and project types.

Second, continue to invest in targeted export promotion programs, like CanExport, PacifiCan and Export Development Canada, which are vital for enabling Canadian hydrogen innovators to access foreign markets.

Finally, enhance federal and provincial coordination on export and distribution infrastructure for hydrogen and its derivatives. The opportunity to lead in low-carbon fuel exports is real but time-sensitive. Buyers and investors are making decisions now.

In closing, I think Canada has the fundamentals, the technology and the talent to compete in the emerging global hydrogen market, but what we need is clarity, coordination and commitment to turn that potential into projects and exports.

Thank you. I look forward to the discussion.

● (1645)

**The Chair:** Thank you, Mr. Billedeau.

Now we are going to Mr. Abergel. You have the floor for five minutes.

[Translation]

**Serge Abergel (Chief Operating Officer, Hydro-Québec Energy Services (U.S.) Inc., Hydro-Québec):** Thank you, Mr. Chair.

Members of the committee, Mr. Chair, thank you for having us today.

Hydro-Québec is a government-owned corporation belonging to the Government of Quebec. It generates, transmits and distributes electricity from renewable sources.

I am the chief operating officer of Hydro-Québec Energy Services U.S., the entity responsible for transactions with neighbouring markets in the United States.

Hydro-Québec is a source of pride for us. It's the largest producer of renewable energy in North America. Its network consists of 62 hydroelectric power plants and has a capacity of 37,000 megawatts.

Hydroelectric power is renewable and flexible. Thanks to the large reservoirs in which we store water and, of course, energy, we can provide baseload power, very quickly scale production up or down to follow market trends, and store energy in the form of water over months, seasons and even years to ensure that energy is available when needed.

This unique product puts Quebec in a unique position that enables us to seize business opportunities around us. This is due first and foremost to our hydroelectric resources, but also to the privileged geographic location we occupy in relation to the markets surrounding us.

Hydro-Québec operates interconnections and transmission lines that cross the border into the United States, more specifically to New York State and New England, but also to Ontario and New Brunswick. These interconnections have a combined capacity of approximately 8,500 megawatts.

More specifically, we've been exporting our electricity to New York State for over 100 years, and to New England for over 30 years. Until very recently, we had 104,000 megawatts of interconnection capacity to the two U.S. markets I just mentioned, namely New York and New England. This capacity will increase significantly thanks to the two new transmission line projects currently under construction. In fact, one has just been completed: the line to Massachusetts and New England. Deliveries began last January. The other line, to New York, is in the final stages of construction.

In terms of volume, we have exported on average about 15 terawatt-hours per year over the past five years, which represents approximately \$6 billion in cumulative revenue, or just over \$1 billion in revenue per year.

There is a distinction to be made regarding the type of sales we've had in the past. We have had a lot of sales on short-term markets. As for upcoming contracts—especially the two major contracts I will elaborate on a bit more—sales will be conducted through long-term agreements. Customers around us have basically shown a great deal of interest in securing firm agreements with Hydro-Québec to guarantee a constant supply to their market and, of course, price stability. In return, those customers were willing to agree to a higher price to receive these guarantees.

In New York, the line I mentioned is the Champlain Hudson Power Express project. It's a 1,250-megawatt line that, by next June, will account for 20% of New York City's energy. In terms of emissions, it's as if every other car in New York City had been removed.

In Massachusetts, we have the New England Clean Energy Connect project, or NECEC. This project has been in operation since January and accounts for 20% of Massachusetts' energy.

In both cases, we're talking about enough energy to power approximately 1 million homes through each of these projects.

For Quebec and neighbouring markets, the benefits are clear. Quebec's renewable energy exports generate significant revenue. In the case of the two new contracts I just mentioned, we're talking about revenue of \$50 billion over 25 years.

The exports are shifting these markets away from fossil fuels. As I mentioned, in New York, that is equivalent to reducing the number of cars by 50%. It's not just about reducing polluting emissions from local power generation, which is often based on oil; it's also about reducing the pollutants that drift down into the city and cause health problems for local residents, especially in disadvantaged neighbourhoods.

Interconnected markets, such as those we have with our neighbours, improve our resilience in the event of major incidents. We remember the ice storm in particular, when Quebec imported a lot of energy, which made it possible to keep the lights on in southern Quebec.

In closing, it is important to emphasize a critical point: In order to maintain the benefits I just mentioned, it is very important that the sector remain tariff-free. We've heard a lot about the tariff threat from our American neighbours. We all benefit from those markets, which are currently open, and it's crucial to maintain this status. It's precisely this openness of markets, from which we all benefit, that enables us to preserve this flexibility and energy security.

• (1650)

That concludes my opening remarks.

Thank you.

**The Chair:** Thank you, Mr. Abergel.

We will now proceed to the question rounds.

[English]

We're going to start with Mr. Martel.

[Translation]

You have the floor for six minutes.

**Richard Martel (Chicoutimi—Le Fjord, CPC):** Thank you, Mr. Chair.

Mr. Abergel, thank you for joining us today.

What you said is interesting. We know that the Americans have imposed tariffs on aluminum and steel. I think electricity is safe for now.

Given that you export to New York and Massachusetts, what would happen if tariffs were imposed on your sector?

• (1655)

**Serge Abergel:** Thank you for the question, Mr. Martel. This is an issue we have spent a great deal of time thinking about and speculating on to try to better understand the consequences of potential tariffs on our electricity sales, as well as on our imports—in the opposite direction, if we import electricity at certain times, of course.

What's important to clarify right now is that, fortunately, there are no tariffs on electricity at the moment. Electricity has never been subject to tariffs, and there are good reasons for that.

First, electricity is not a tangible good. It doesn't cross a border crossing like a good that could simply be intercepted and on which tariffs could be imposed. So, if tariffs were to be imposed, the Americans would have to set up an entire tracking infrastructure, which would be extremely complex. It would certainly take more than a year to set up, measure and track that.

Second, the absence of tariffs obviously allows for this flexibility between markets. So energy can flow, often from north to south, but also from south to north, when market opportunities are attractive. We see attractive market opportunities particularly in the context of the rise of intermittent energy sources in the northeast, here. Wind energy and solar energy create extremely low prices at certain times. Obviously, when they're not available, prices are extremely high. That creates import opportunities, but conversely, it also creates export opportunities at high prices. The discrepancy between the two is very attractive and a win-win for everyone. When we export, we inevitably add supply to the market, which reduces prices for Americans.

If all of that were subject to tariffs, according to our calculations and projections, there would be an increase in wholesale prices in the New England and New York markets of up to roughly 30% during peak periods, since we are a major player in those markets. In terms of costs, the impact would be significant during those hours when energy demand is very high.

The other barrier worth mentioning concerns reliability. When you start imposing tariffs, 25% barriers or other measures of this kind, it means that energy can flow less freely. In such a scenario, we can imagine emergency situations, such as ice storms, where neighbouring communities need to be supplied with energy. There would be this administrative burden, these additional barriers, and these extra costs that would then be passed on to consumers. This could create significant reliability issues in some emergency situations.

**Richard Martel:** Regarding surpluses, I know that at one point, for a long time, we had good capacity and surpluses. We were happy to have surpluses because that gave us some flexibility. Today, we are quite limited when it comes to surpluses.

What does not having that cushion mean to you? I wouldn't say we're in a tight spot, but we no longer have much flexibility.

**Serge Abergel:** Regarding surpluses, it is important to specify that the contracts we signed were based on electricity production from existing power plants in Quebec. We have been very cautious then in everything we have done, by keeping a close eye on firm commitments. I am referring to firm commitments in Quebec—that is, demand and load in Quebec—and firm commitments in the mar-

kets we have now in New York and Massachusetts. Therefore, our existing resources allow us to meet our firm commitments both in Quebec and in the markets.

It's important to note, however, when discussing the future and the need to keep pace with anticipated demand growth, that it will take new facilities, investments and meeting this future demand when it arises and materializes.

Right now, we see that demand is growing, and we are in the process of rolling out our action plan, which spans a period extending through 2035. We will gradually invest nearly \$200 billion in new energy production infrastructure, which will be in place in time to meet this growth in demand.

Until we are able to deploy these new resources, we have the flexibility to withdraw from short-term markets. In terms of exports, short-term markets involve transactions that are not tied to contracts. On the hourly market or the so-called day-ahead market, we bid on transactions. It is based on our surplus. Should we have less flexibility, we are able to withdraw from these markets to focus more on our firm commitments.

Thus, the strategy is extremely cautious, to ensure that we can meet our obligations at all times, both those in Quebec and those related to our contracts.

• (1700)

**Richard Martel:** I have only 30 seconds left. I have another series of interesting questions to put, but I will ask them later, rather than start now. I will then cede the floor to my colleagues.

**The Chair:** Thank you.

Mr. Guay for six minutes.

**Claude Guay (LaSalle—Émard—Verdun, Lib.):** Thank you, Mr. Chair.

I would like to thank the witnesses for taking the time to join us.

I'll pick up where Mr. Martel left off.

I spend a lot of time with mining developers, among others, in Quebec. One question comes up all the time: Do you have an allocated block of electricity?

I understand what you're saying about current demand and the capacity to meet Quebec's needs. However, the country has very ambitious goals. When I speak with the Quebec government, I see that Quebec also has ambitious goals. We want to be able to develop our markets and process our resources, and thus have more mining projects, for example, and electric vehicles. As you said, I think we're talking about a demand of 60 terawatts by 2035. However, as far as I know, our water reservoirs have dropped.

We need to encourage development. However, isn't there a risk of a mismatch between the demand growth and what Hydro-Québec will be able to do to meet it?

What specific actions then could we take to achieve efficiency gains? You mentioned the short-term market, but in my view, there are other ideas Hydro-Québec is working on. I would like to know what reliable sources might be available.

**Serge Abergel:** I can start by going into more detail about the action plan to try to give a clearer picture of the overall situation. I could then come back to the energy blocks and the allocation process, which is governed by a Quebec government mechanism.

As for the action plan, I mentioned some \$200 billion in investments by 2035. It includes a series of different initiatives that were simultaneously launched a few years ago.

On the one hand, we need to increase electricity production. That is essential. At the same time, we also need to diversify it.

A tremendous amount of work has been done on wind energy. Our goal is to deploy more than 10,000 megawatts of new wind resources during this period, so it's very ambitious. We are currently deploying approximately 5,000 megawatts of the 10,000 megawatts to be deployed by 2035. So there is concrete progress on this front. Just recently, we announced the first construction projects for the Seigneurie de Beaupré wind farms. We're talking about 1,200 megawatts of capacity, with 400 megawatts in the first phase set to come online in 2028. So the tangible benefits of this new wind power generation are on the way.

Obviously, this is perfectly compatible with our hydroelectric reservoirs, because reservoirs act as batteries. We generate more wind energy, use it for local power, and store water in the reservoirs. This ties back to the water issue you mentioned earlier. It helps us in that regard.

At the same time, we're also doing a lot of work to refurbish our hydroelectric plants to give us even more capacity in that area. In existing plants where we're replacing turbine-generator units that are worn out and have reached the end of their approximately 50-year lifespan, we're installing more efficient and better-designed units thanks to technology. This will result in efficiency gains of over 10%. So, we're producing more energy, or we're producing the same amount of energy with less water, depending on how you look at it. Again, these gains will allow us to meet future demand. This is being phased in annually with our suppliers. We are truly on a very steady and predictable trajectory, because this is an area in which we have a great deal of experience.

Incidentally, I won't go into detail on every aspect of the action plan, because we could spend a lot of time on it, but I think it's im-

portant to mention our energy efficiency efforts. What can we do to reduce the load on our end? Obviously, these are immediate gains, and they are the most affordable gains for customers. On this front, we have a target of 22 terawatt-hours of energy efficiency gains across a wide range of areas. For example, you've surely heard about all the home automation systems we're deploying for customers. Today, customers can have us install a smart thermostat and several devices in their homes that will allow them to adjust their energy consumption when it will have very little impact on their quality of life. This represents savings of 22 terawatt-hours. In the United States, that would be the equivalent of 2.2 million homes—or the equivalent of the two contracts.

• (1705)

**Claude Guay:** Mr. Abergel, I want to make sure I use my speaking time to the fullest, and there is another question I wanted to ask you.

In the federal government's 2025 budget, eligibility for the clean energy investment tax credit has been extended to Crown corporations. What does this mean for Hydro-Québec? What will this allow Hydro-Québec to do?

**Serge Abergel:** I prefer not to speculate on the answer. I haven't necessarily examined this issue as part of my work. However, we could do a follow-up later.

**Claude Guay:** You could ask your head of financial services to give you the answer.

**Serge Abergel:** My colleague here is able to respond.

**David Laureti (Advisor, Government Affairs, Hydro-Québec):** Our eligibility for the clean electricity investment tax credit had long been a request from the industry. Hydro-Québec was pleased to see this included in the latest budget. Since the passage of the budget implementation bill, or Bill C-15, we can now take advantage of this tax credit.

Mr. Abergel mentioned \$200 billion in investments. Since this is a tax credit of up to 15% of expenses, you can imagine the positive impact this will have on project costs, in particular. From Hydro-Québec's perspective, ultimately, our entire customer base will benefit. By lowering project costs, we will be able to carry out projects at a lower cost, and, ultimately, this will be reflected on both residential and industrial rates.

**Claude Guay:** Thank you very much.

Mr. Chair, do I have time for one last brief question?

**The Chair:** No.

Mr. Simard for six minutes.

**Mario Simard:** Thank you very much, Mr. Chair.

I would like to thank the witnesses for joining us.

Mr. Abergel, I would like to follow up on what you said about rates at the end of your opening remarks. It is easy to understand that it's not in the Americans' interest to impose tariffs on hydroelectricity since, ultimately, they would be the ones to suffer.

We also know that there are people who have viewed hydroelectricity as a means of putting pressure on the United States. In that scenario, the cost would be disproportionate for Quebec, since we would, in a sense, be the bargaining chip in negotiations. Despite certain statements made by Mr. Ford in Ontario, I do not believe it is in the government's interest to do this, but it is worth reiterating that it would be a very bad idea to go down that path. I think this is a concern that everyone in the House of Commons shares regarding the trade dispute. I do not believe that hydroelectricity should be used as a bargaining chip.

Earlier, you said that the \$200 billion in investments applied to projects Hydro-Québec was currently undertaking, particularly in the wind energy sector, to expand the energy mix.

I would like to know what investments have been made and will be made in the line you have to Massachusetts and in the line to New York, which is currently under construction. I want to know what these infrastructure investments entail. Furthermore, have you received any form of support from the federal government for this infrastructure?

**Serge Abergel:** The two transmission lines to the United States discussed here—the Champlain Hudson Power Express project and the New England Clean Energy Connect project—have not received financial support from the federal government.

Generally speaking, Hydro-Québec finances its own facilities through the issuance of bonds, among other means, and the revenue it generates. There are therefore no government investments.

I'll go into a bit more detail. Both links involve converter stations. It's important to note that we deliver energy via direct-current lines. Since Quebec's transmission grid operates on alternating current, this requires a converter station. This is highly complex and very expensive equipment installed near the border. There is then a transmission line that crosses the border and runs down to another converter station, on the opposite side, in the United States.

Let's take the example of the line that goes to New York. The Hertel converter station sits on Montreal's south shore. The line then runs along Highway 15, under Lake Champlain, and arrives, via the Hudson River, in Astoria, in New York City's Queens borough, where there is another converter station.

On the Quebec side, the bulk of the expenses are related to the converter station. We're talking about expenditures in the range of over \$1 billion for converter stations of this nature. If we factor in the transmission line that follows, we're perhaps looking at \$1.5 billion in investments.

What's important to consider regarding these investments is that this equipment has a long lifespan. We're perhaps looking at 80 years for this type of transmission line. These are therefore as-

sets that will generate revenue and wealth for a very, very long time.

Beyond the contracts—and this is the most interesting point about these lines—it takes us into markets that are increasingly deploying intermittent resources. When I talk about intermittent resources, I'm referring mainly to wind power in the New York region, offshore wind power—yes, it's slowed down, although construction is still happening and will continue once the administration changes—and solar power.

Obviously, these resources drive prices down significantly at certain times. There will even be surpluses, according to projections. By 2040, there will be surpluses of intermittent resources and near-zero prices in the markets. This will allow us to bring energy back to Quebec at a very low cost and to feed that energy back into those markets at times when demand is very high and intermittent energy isn't available.

It's a real asset for Quebec to have this access to markets and to be able not only to reduce emissions but also to generate revenue.

• (1710)

**Mario Simard:** So, it also helps manage peak periods.

I love your answer. It shows us that there are energy export models that don't need federal government support and that are profitable over several years. I invite some gas industry developers to take notes, perhaps.

My friend Claude Guay briefly mentioned the availability of energy blocks, and you spoke about energy efficiency. I know that Hydro-Québec is making a lot of efforts in this regard.

Currently, people with low demand receive immediate approval from Hydro-Québec. I think that's when it's under five megawatts. If it's above that, it's a bit more complex. There are systems that allow people to be, let's say, creative, which lets them get below five megawatts. They can thus manage to secure an energy block and perhaps redistribute it later into the grid.

I don't know if Hydro-Québec funds this—that is, companies trying to implement energy coupling to reduce their consumption. Does Hydro-Québec have such a program?

**Serge Abergel:** In general, Hydro-Québec encourages good energy consumption. This aligns with the implementation of the action plan. It ties in with the 22 terawatt-hour target that I mentioned earlier.

Hydro-Québec spends roughly \$1 billion a year on various programs designed to improve energy efficiency in Quebec. These are the cheapest electrons available.

We could probably provide a number of examples. There are indeed a number of initiatives under way that provide broad support to residential clients and certain companies to help them optimize their consumption.

**Mario Simard:** We'll come back to this.

Thank you.

**The Chair:** Thank you.

[English]

Colleagues, we're going on to our second round. We were to have the committee business portion of the meeting. My sense is that it won't be necessary today. We're going to be coming back with some suggestions for further studies. My suggestion is that we use that for witnesses so that we can complete a second round. Do we agree?

**Some hon. members:** Agreed.

[Translation]

**The Chair:** I'll give the floor to Mr. Martel for five minutes.

**Richard Martel:** Thank you, Mr. Chair.

Mr. Abergel, we can see that upgrading Rio Tinto's dams is costly, but necessary. That's also where you come in.

Will our local companies be asked to carry out this work? Can they meet Hydro-Québec's needs?

**Serge Abergel:** The beauty of a hydroelectric facility is its long lifespan. When properly maintained, a hydroelectric plant can last a long time. At Hydro-Québec, we operate facilities that have been in service for over 100 years and that continue to generate affordable energy for clients, since these facilities can pay for themselves.

Good maintenance is indeed necessary. In Quebec, we have an extremely well-established ecosystem of companies that provide excellent services for all the maintenance and repair work that we carry out at our plants. This ecosystem is firmly in place.

Moreover, this ecosystem has helped us to increase our initial figure of 2,000 megawatts to 2,400 megawatts in the course of upgrading our power plants. This ecosystem has made that possible. This industry in Quebec has been able to further optimize its equipment. We just increased the number of megawatts from our current facilities. We owe it to this industry and its firmly established presence.

This industry, with its wealth of experience, also means that we can look forward to a steady stream of power plant upgrade projects over the next 15 to 20 years, one after the other, with a high level of predictability. That's an asset for us.

• (1715)

**Richard Martel:** Can you name some of these companies?

**Serge Abergel:** We have Voith Hydro, for example. General Electric, one of many examples, also has a strong presence. There are a number of companies in Quebec.

The subcontractors that help us with work on our power plants include Kiewit, which has a strong presence in Quebec. We have Hitachi. We also have SNC-Lavalin, which has now become AtkinsRéalis. I apologize for saying a word that shouldn't be said here. I heard myself say it, and I had a strong feeling that I shouldn't say it.

In short, we have a firmly established ecosystem in Quebec. This makes Hydro-Québec even stronger.

**Richard Martel:** Let's talk about wind turbines. First, why was wind power chosen as the main source of electricity generation to increase your capacity?

**Serge Abergel:** On that note, I should point out that the action plan includes a wide variety of resources. Wind power is indeed abundant, but so is hydroelectricity.

It's worth noting that wind power projects are generally deployed much more quickly than hydroelectric projects. It isn't the same type of energy. The products are quite different. That's the key point. Wind power has a load factor, or capacity factor, of 35% to 40%. It isn't flexible. It isn't available on demand. It's available when the wind blows. Obviously, this creates certain variations. When we combine wind power with Quebec's hydroelectricity and our reservoirs, it makes for a great asset. It makes for a highly effective energy mix.

When we talk about wind power, we're adding it to diversify the energy sources and to quickly deploy what we have.

When we talk about hydroelectricity, we have a long-term vision. It takes us a considerable amount of time to build infrastructure, but the infrastructure has a long lifespan.

When we talk about hydroelectricity with reservoirs, the product is flexible, available on demand and highly complementary to the other sources that I just described, but that provide this security and reliability. The deployment timelines are completely different.

However, the benefit, as I said, lies in the fact that the 62 hydroelectric plants account for 37,000 megawatts. Some of them are over 100 years old. I can tell you that they'll still be around in 100 years as a result of our maintenance work.

**Richard Martel:** I would like to know how much of your wind turbines are currently purchased locally. I know that you also import. I've already discussed this, but could you elaborate on this topic, Mr. Laureti?

**David Laureti:** Hydro-Québec is proud to encourage domestic consumption. It matters a great deal to us. Mr. Abergel spoke about the whole ecosystem built up over the years around the maintenance of our hydroelectric plants.

Wind farms are a more recent development in Quebec's history. However, Hydro-Québec is keenly aware of them. A number of groups have been formed over the past 20 or 25 years. The Quebec government, for example, wanted to promote the construction of wind turbines. It also wanted to support certain regions. Think of the Gaspésie region, which at one point rallied behind the construction of wind turbines.

We're now, of course, talking about the construction of large-scale wind farms, meaning 10,000 megawatts—

**The Chair:** Thank you.

[English]

The time is up.

Mr. Clark, you have five minutes.

**Braedon Clark:** Thank you very much, Mr. Chair.

Mr. Billedeau, I want to ask you a couple of questions. I too am in rainy, beautiful Halifax, so I want to get your take on hydrogen in general. I really appreciate your being here.

Hydrogen is one subject that over the course of this study, we haven't been able to talk about as much as we should or need to. As you know, it's a hot topic in Nova Scotia, with products in various states of play. EverWind is in the news the most.

For the benefit of the committee, could you give us your take on where you see hydrogen having the most value and utility for Canada, going forward, from an export perspective?

**David Billedeau:** You're correct. There is a lot of ongoing activity in Atlantic Canada's hydrogen sector. Much of that activity is export-focused. In fact, the vast majority of investment in hydrogen infrastructure on the east coast is focused on exporting green hydrogen and green ammonia to Europe, particularly to Germany. That is largely driven, as I mentioned in my opening remarks, by the H2-Global double-blind, contracts-for-difference auctioning program.

For the committee's reference, that program brings together buyers in Germany with producers of hydrogen and green ammonia in Canada. Both sides, in a blind format, set their price to sell and their price to buy. Then a contract for difference enters into play to offset cost deltas there. That is the main driver to really kick-start the export dynamic between Canada and Europe, when it comes to hydrogen and its derivatives. We're seeing continued investments in this space.

You mentioned organizations like EverWind being the flag-bearers for green hydrogen production. That is 100% accurate. I think one of the challenges the sector is facing is twofold.

When we've discussed hydrogen in public policy discourse, it's always been seen, in Canada and internationally, on a 10-year time horizon for projects to really take shape and for export markets to develop. One of the challenges is that we're seeing export markets develop much more rapidly than we thought. Germany is really pushing forward with executing that H2Global auction on an accelerated timeline. I wouldn't be surprised if, by the close of 2026, the first auction for Canadian-produced hydrogen to Germany takes place. That is moving forward quite quickly.

As I also mentioned, other markets, like Asia-Pacific, Japan particularly, are putting ships in the water to fill up with liquid hydrogen. Even on the west coast of the country, there are material opportunities to expand our energy exports through production and export of hydrogen.

Obviously, in both markets I mentioned—Asia-Pacific and Europe—they are not only looking for affordable and reliable producers of hydrogen, but also looking for low-carbon producers of hydrogen. That's one of the other challenges, or opportunities perhaps, Canada is facing. Right now, the majority of our 3.5 million to 4.5

million tonnes produced annually is grey hydrogen. It's more carbon-intensive and unabated. What we're seeing on the east coast is really the turning of the page of that chapter into Canada being a low-carbon hydrogen producer with exports in mind.

• (1720)

**Braedon Clark:** Excellent. Thank you very much, Mr. Billedeau.

I know this is a study about energy exports, but I'll also mention that green hydrogen can also be a real game-changer in terms of emissions from what have been difficult to green sectors like cement or steel or other things. That's a shameless plug there, I know.

I also wanted to ask a question of my friends from Hydro-Québec before I run out of time. I'm a bit of a broken record on this, but being an MP from Nova Scotia, I know the wind west project is a big deal for us and something that we're really interested in. I know that our two provinces have been in discussions on that.

Perhaps Mr. Abergel, you could give us your thoughts on wind west and how you can see that perhaps complementing what you do at Hydro-Québec?

[Translation]

**Serge Abergel:** I want to thank the member for his question.

Wind West is one of the various initiatives under consideration from a post-2035 perspective. I spoke about the 2035 action plan. However, we're also looking at other options available post-2035. Offshore wind power is indeed one avenue that we want to explore in order to gain a better understanding of this energy source. To this end, we recently launched a request for information to obtain as many details as possible on the topic.

To answer the question, we believe that this energy source provides an excellent complement to our hydroelectric resources, which we can store in our reservoirs. Offshore wind power has a high load factor of over 50% or even 60%. Of course, it's intermittent. That said, wind power and hydroelectricity complement each other perfectly. We're interested in this.

• (1725)

**The Chair:** Thank you.

Mr. Simard, you have the floor for two and a half minutes.

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

Perhaps I'll clarify what we talked about earlier.

I understand that some federal programs could benefit Hydro-Québec. For example, we talked about the clean electricity tax credit. I clearly understand that Hydro-Québec has no desire to have federal standards regulate its work. As a member of the Bloc Québécois, I don't believe that we should go down that road—far from it. However, the federal government may have a role to play in the near future. We want to study the clean electricity issue together.

Back home in the Saguenay—Lac-Saint-Jean region, I heard that companies were having trouble accessing energy blocks for their projects. Some people say that they can sometimes reduce demand by also using storage technologies.

Would you welcome federal participation to help companies develop in-house storage capacity in order to reduce their demand for energy blocks?

That's why I asked you earlier whether Hydro-Québec provided financial support to companies trying to take this step.

**Serge Abergel:** First, I just want to say that the Quebec government regulates the process for allocating blocks of electricity. We must provide the service for any demand of less than five megawatts. When the demand exceeds five megawatts, the government carries out an assessment to look at the economic benefits and other factors before making a decision.

I'll give the floor to Mr. Laureti, who can provide further details.

**David Laureti:** I want to thank the member for his question.

Mr. Abergel spoke earlier about the support that we provide and the need to develop energy efficiency because it's the cheapest form of energy.

Hydro-Québec has completely dedicated teams. The action plan objectives in this area are also highly ambitious. The dedicated teams work with the companies to help them reduce their consumption. They also help us reduce consumption during peak energy periods, which remain challenging. This places tremendous pressure on the grid.

I don't know which company you're talking about. However, companies generally have business representatives at Hydro-Québec who talk to them. We know that we can't always simply turn off the switch, which can affect an industrial process. So our business representatives have discussions with these companies. When a period of extreme cold is forecast, for example, we'll sometimes ask them two or three days in advance whether they can reduce their consumption at that time.

We know that some companies now specialize in managing these peak periods and that they help other companies. I think that it's a virtuous circle. I don't know whether the company in question is already working with us. We could check and get back to you later.

**The Chair:** Thank you.

Mr. Martel, you have the floor for five minutes.

**Richard Martel:** Thank you, Mr. Chair.

One issue keeps coming up. In Nova Scotia, plans are under way to build two new natural gas-fired plants that can shift to light fuel

oil, since safety and natural gas supply remain a concern during peak periods.

I ask myself this question all the time. Could Hydro-Québec provide energy to build greater resilience across Canada?

**Serge Abergel:** I want to thank Mr. Martel for his question.

Just as we're exploring the potential of offshore wind power in Nova Scotia, we're also thinking about optimizing access to the markets around us. Nova Scotia is one of these potential markets. We can access this market through New Brunswick. We're looking at how increased interconnection, with more transmission lines in the longer term, can provide added value for everyone. The goal is for everyone to come out a winner.

Interconnection, or increased access to neighbouring markets, is one avenue that we're working on. At certain times, in the case of Quebec, for example, we can see its flexible energy heading for Nova Scotia. At other times, we can see intermittent renewable energies returning to Quebec given both their renewable properties and their considerable affordability.

● (1730)

**Richard Martel:** Mr. Abergel, how does Hydro-Québec feel about the idea of a pipeline to transport natural gas to the east?

If a project of this nature were to go ahead, could Hydro-Québec play a role? If so, what would be the conditions?

**Serge Abergel:** Since this falls outside our mandate, we don't really have a position on this. Instead, the government must take a position on this. I'm not the best person to speculate on this issue.

**Richard Martel:** Okay.

Mr. Abergel, there are costs involved in maintaining transmission lines. I would like to talk about the local benefits.

What percentage of transmission line maintenance investments do you think that local purchases account for?

**Serge Abergel:** In terms of local benefits and our local purchases in the Quebec market, Mr. Martel, we have an exact percentage that's extremely high. I have in mind a figure of over 90%. However, we can verify this and give you the exact percentage.

**Richard Martel:** If you have any documents, can you send them to us?

**Serge Abergel:** Yes. Absolutely. I'm sure that you'll find the response extremely reassuring.

**Richard Martel:** Thank you.

Now let's talk about the workforce. As we heard earlier, Hydro-Québec is facing major challenges in this area.

Do you have a strategy for attracting, developing and retaining talent?

**Serge Abergel:** We do indeed have a strategy in this area. The workforce constitutes one challenge to overcome when implementing the action plan. We need over 35,000 workers to fulfill these ambitions. The workforce does pose a challenge. We have a whole action plan in place to ensure that we have the workforce needed today, but also to train the next generation of highly qualified workers for the future.

Mr. Laureti, would you like to elaborate on this?

**David Laureti:** Together with the Quebec government, we recently announced an initiative to speed up the training of these workers. We want to attract them and keep them here. They will be extremely useful and necessary for the implementation of the action plan. This is one initiative that we developed with the Quebec department of education. It will help us overcome this workforce challenge.

That said, we'll indeed require 35,000 workers. That's a considerable amount. We're also competing with other major work sites.

**Richard Martel:** Could the Government of Canada play a significant role in supporting your efforts in this area?

**Serge Abergel:** We work in collaborative fashion. We're indeed open to any initiative that seeks to achieve this goal and that benefits society.

**Richard Martel:** Thank you.

**The Chair:** Thank you, Mr. Martel.

[English]

Mr. Hogan, you're wrapping up this panel with five minutes.

**Corey Hogan:** Thank you, Mr. Chair.

Mr. Billedeau, I have a couple of questions, and one is just really rapid fire: For the German system, what per cent is currently being picked up by CFDs, and what is Germany's long-term plan for that program?

**David Billedeau:** That's a great question. Again, it's yet to be implemented. We don't quite know what degree of bridge will need to be gapped through this contracts-for-difference element of the auction process.

In terms of the long-term outlook for the H2Global program, again, Germany has put over 200 million euros of state aid into the project so far, to be set aside to help with the contract-for-difference element. That will have to be replenished as it gets wound down. It will really depend on continued support from the governments of both Canada and Germany to continuously top up that program.

The expectation is that as production scales, cost will come down on the Canadian side, so over a period of probably between five to 10 years the need for the contract-for-difference element in the auction will gradually fizzle out.

One thing I want to note in terms of long-term outlook, as well, is from discussions with the organizers of the H2Global program on

the German side. They very much see this as a potential template for other auctions. If the H2Global auction process is successful in supporting the export of Canadian hydrogen and green ammonia to Germany, they see no reason it couldn't be replicated in other sectors, like critical minerals. I view this as a broader opportunity for Canada not just in hydrogen exports but also, potentially, in using the H2Global template for other areas.

• (1735)

**Corey Hogan:** That's fantastic, and it leads into my next question pretty naturally, which is about the connection and interplay between domestic and export markets.

You talked about scale being one of the things the H2Global program will potentially unlock and about how scale can also be developed domestically. I want to throw out that question specifically, but I am also mindful that this is the last moment of the committee. Hydro-Québec has been here. They are a crown jewel. They are established. They're in the tens of billions. We are so grateful for their time, but the downside is, perhaps, that we haven't had the opportunity to discuss hydrogen as much as we and you would like.

I can offer you the last word. Is there anything else you want to say about this topic? I'd also encourage you to provide anything else for the report in writing.

**David Billedeau:** I'm happy to provide a number of briefs the Canadian Hydrogen Association has or is continuing to develop on market and climate opportunities associated with hydrogen deployment.

I will note that a number of projects, particularly on the east coast, are export-oriented, but they're also supporting the regional deployment of hydrogen in local economies. Atlantic Canada has no shortage of opportunities for hydrogen application, whether it's direct integration into energy systems, supporting decarbonization, energy transition, marine transport or industrial heating. The list goes on.

I'll also note that, across Canada, different regions of the country have different strengths, of course, when it comes to production and potential application. One of the larger opportunities for domestic applications of hydrogen is industrial. That resides in jurisdictions like Ontario. There are a number of potential major end-users in that province and across Canada we could discuss at length, but perhaps we'll have to save that for another discussion.

**Corey Hogan:** It looks like we have a couple of seconds left.

In terms of other blue hydrogen opportunities that might exist out west, is there anything you want to make the committee aware of?

**David Billedeau:** I have two points. They're on both blue hydrogen and the emerging technologies associated with natural hydrogen development, which is basically extracting hydrogen stored underground.

Alberta has a similar expertise in oil and gas extraction that could be rapidly applied to natural hydrogen. Blue hydrogen and natural hydrogen on the west coast of Canada can be rapidly developed and scaled to support not only domestic applications associated with hydrogen but also rapidly emerging export opportunities. Again, Japan is moving forward with a four-year time horizon to fill that liquid hydrogen tanker up, ideally with Canadian liquid hydrogen, but there are a lot of requirements that have to be addressed for that to happen. These are not only on the production side for blue and natural hydrogen but also on the transmission and export infrastructure side.

There are a number of challenges associated with really scaling hydrogen for domestic and export applications that have to be addressed, but my main take-away is that this is real, and the timelines are quite short.

**The Chair:** Thank you, both.

Colleagues, on your behalf, let me thank our witnesses for coming to see us today. It's good to hear from the hydrogen sector and the hydro sector. We hadn't heard enough from those sectors, and this is going to help us round out our study. Thank you for good, respectful questions today. We will be back.

Why don't we let our witnesses go? We're going to use a few moments at the end to talk about next week.

We're reconvening on the 21st to resume our study.

Shannon, go ahead.

**Shannon Stubbs:** Thank you, Chair.

I think all of us will be open to this. Would you be willing to set aside, let's say, a 30-minute allotment or some time during our next meeting to discuss some motions and our business going forward?

**The Chair:** Let me take that under advisement.

Why don't you and I have a conversation and we can bring Mario. I'm sure we'll come to an agreement.

● (1740)

**Shannon Stubbs:** Okay.

**The Chair:** With that, colleagues, have a great weekend—for those who don't have House duty tomorrow.

We are adjourned.

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