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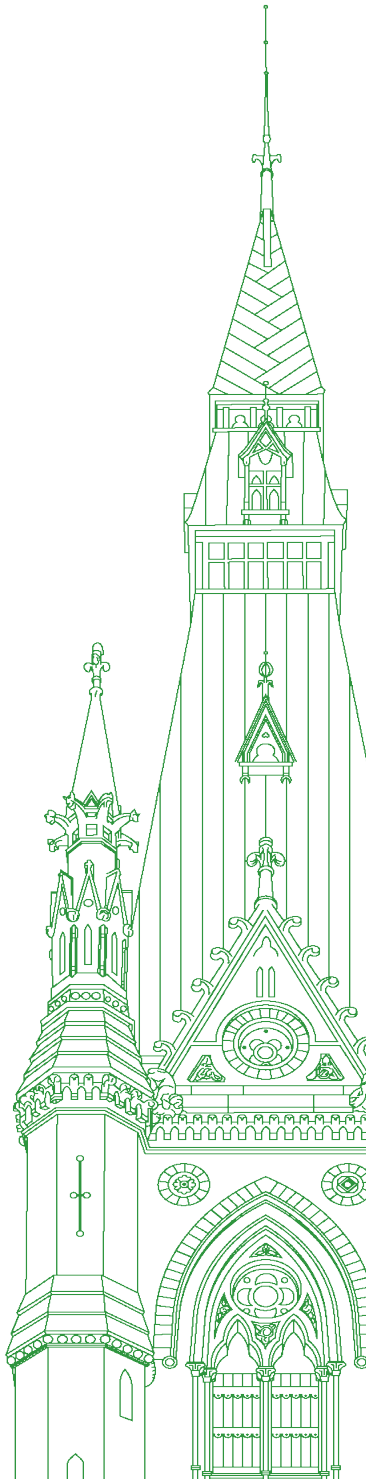

Chair: Charles Sousa

Standing Committee on National Defence

Monday, March 23, 2026

● (1100)

[*English*]

The Chair (Charles Sousa (Mississauga—Lakeshore, Lib.)): I call this meeting to order.

Welcome to meeting number 28 of the House of Commons Standing Committee on National Defence.

Pursuant to Standing Order 108(2) and the motion adopted by the committee on Tuesday, September 16, 2025, the committee is meeting to resume its study of the nexus between national defence, national security and Canada's critical minerals sector.

Today's meeting is taking place in a hybrid format, pursuant to the Standing Orders. Members are attending in person and remotely using the Zoom application. Before we continue, I ask participants to consult the guidelines on the table. These measures are there to help prevent audio and feedback incidents to protect the health and safety of our interpreters.

I'd like to remind witnesses and members to please wait until you're recognized by name before speaking. If you wish to speak, please raise your hand. For members on Zoom, please use the "raise hand" function. The clerk and I will manage the speaking order as best we can.

For interpretation, you can use your earpiece and select the appropriate channel. As always, all comments should be addressed through the chair.

I'd like to welcome our witnesses.

We have Wendy Hadwen, assistant deputy minister, policy-industry, Department of National Defence, and from the Department of Natural Resources, we have Isabella Chan, senior assistant deputy minister, lands and minerals sector.

I would like to proceed with the witnesses' opening statements of five minutes each.

Wendy, why don't you start us off?

Wendy Hadwen (Assistant Deputy Minister, Policy-Industry, Department of National Defence): Thank you so much, Mr. Chair.

[*Translation*]

Mr. Chair and members of the committee, thank you for inviting me to take part in this very important parliamentary study.

[*English*]

I would like to make three points in my opening presentation.

First, Canada's critical mineral assets represent an economic and industrial advantage for Canada, recognized in the defence industrial strategy; second, our critical minerals can play an important part in our own defence industrial supply chain; and third, we are also working at NATO to establish mechanisms for Canada's critical minerals to be part of an allied supply chain.

Starting with the economic advantage, every country is grappling with how to ensure strategic independence for their supply chains, and Canada is no exception. You may have seen that the defence industrial strategy's pillar four is focused on exactly this topic—supply chain security. What sets Canada apart, though, is that we are the supply chain in many ways. We don't have to find raw materials; we have them right here. We need to access and process our materials and make it easier for them to get to market, all of which we have started thanks to Isabella and her department's help, and we intend to do more of this. Specifically, the defence industrial strategy focuses on localizing production and strengthening domestic manufacturing.

[*Translation*]

Canada's defence industrial strategy commits Canada to taking the necessary steps to secure a domestic supply of key raw materials, particularly steel, aluminum and critical minerals. The defence investment agency will play an important role in procurement processes, and in negotiating stockpiling agreements and in long-term purchases.

[*English*]

This brings me to my second point.

Canada's defence sector, as you know, is an important contributor to the economy, with close to 600 firms supporting over 61,000 jobs and contributing $7.4 billion to GDP in 2022 across the defence value chain.

The defence sector in Canada is one of the most research-intensive industries in the country, with companies investing heavily in innovation. In 2022, the sector spent $440 million on research and development, which is more than three times the intensity of Canadian manufacturing overall. It also employs a disproportionately high share of science, technology, engineering and mathematics talent, giving Canada a strong advantage in developing and securing its defence supply chains.

[*Translation*]

Canada's defence industrial strategy defines 10 sovereign capabilities and 32 subcategories that together make up Canada's defence demand signal. These are areas in which Canada has business requirements and, more importantly, real industrial potential. In all of these areas, we can leverage our critical minerals advantage in keeping with the strategy's guiding principle of build, partner and buy.

[*English*]

There are two specific examples I wish to mention.

First, emerging quantum classical chips increasingly rely on materials like germanium, which can become superconducting when small amounts of gallium are added. This enables superconducting and semiconducting components to operate on a single chip, complementing silicon in next-generation quantum systems, which are outlined as a sovereign capability in the DIS.

Another example is space launch. As the government announced last week with investments of $183 million for sovereign space launch, we are set up with a lease agreement in collaboration with three innovative companies to deliver light-lift payloads to outer space within two years. There is materials science in the manufacture of rocketry and satellites, the opportunity being to reduce weight and increase flexibility but also to manage the transfer of heat and the resilience of these materials, all of which can be enabled by Canada's critical minerals advantage.

Through the defence industrial strategy, Canada can apply its programs, policies and scientific strengths to support the industries that create a military advantage and, at the same time, strengthen Canada's broader economic position.

I'll close on our participation in the allied supply chain. We are advancing critical minerals in defence with our allies through a high visibility project at NATO, the North Atlantic Treaty Organization, specifically on stockpiling critical minerals for defence. This was launched in June 2025 and will help facilitate access to a sufficient supply of critical raw materials for defence, such as lithium, titanium and rare earth elements. It will help make NATO less vulnerable to supply shocks and will reduce reliance on external providers.

Canada is taking a leading role in negotiations on an MOU to establish a coordinated allied framework, which we hope will be agreed to this year. Twelve allies are supporting us in this work.

● (1105)

[*Translation*]

Speaking of allies, I just came back from France, the U.K. and Belgium. All of our allies have consistently highlighted that access to critical minerals in defence is now a requirement for the activities of their armed forces.

[*English*]

Our allies have highlighted the urgent demand for secure, scalable and diversified supply of critical minerals for defence needs. They are eager to partner with us. They are already seeking secure supply chains and Canadian projects. Our allies and partners—not just in NATO but also Japan, Korea and Ukraine—expect Canada not only to have potential but also to deliver scaled, reliable production that strengthens our collective resilience.

[*Translation*]

This is precisely what the Department of National Defence, the Department of Industry, the Department of Natural Resources, and, more personally, Ms. Chan and I will be focusing on in the coming months. We welcome the role that the committee's study will play in helping us meet that challenge.

[*English*]

The Chair: Thank you very much, Ms. Hadwen.

Ms. Chan, I pass the floor over to you.

Isabella Chan (Senior Assistant Deputy Minister, Lands and Minerals Sector, Department of Natural Resources): Thank you, Mr. Chair.

Thank you to the committee members for the invitation.

[*Translation*]

Thank you for the opportunity to contribute to your study on the nexus between critical minerals, national defence and national security.

[*English*]

Critical minerals have moved from being an industrial input to a global priority as concentrated supply chains, surging demands from the energy transition, and the focus on defence spending and military readiness converge to heighten their strategic importance in economic and national security. This is particularly salient in today's geopolitical context. The disruption in the flow of goods and materials in the Middle East impacts not only oil but also critical mineral supply chains.

Public reporting has noted that aluminum prices recently reached their highest level in nearly four years amid concerns of supply disruption through the Strait of Hormuz.

Modern munitions rely heavily on critical minerals, including antimony, arsenic, copper, nickel and tungsten, which are under growing supply pressures. Many of these critical minerals for defence are concentrated at the upstream and midstream of the supply chains, sometimes dominated by a single country.

[*Translation*]

Canada is in a unique and fortunate position in defence industry value chains.

[*English*]

For example, Canada is a current producer of the 12 minerals that have been identified as critical by NATO, or there is the potential to produce all 12. In addition to our significant upstream resource base, Canada also has the potential to expand midstream and downstream capacity, which I understand other witnesses have noted as essential to reducing allied dependence on non-market economies, as resource endowment alone does not guarantee supply security.

The Government of Canada recognizes that secure supply chains for critical minerals are a core element of defence capability, as they are integral components for a wide range of capabilities used by the Canadian Armed Forces, such as fighter jets and naval vessels, as well as for dual-use technologies, including communication systems, satellites and batteries.

We are taking concrete steps to strengthen the critical minerals supply chain, which will support our defence capability, operational readiness and national resilience. Canada intends to extract, process, manufacture and recycle critical minerals by building up every part of the supply chain at home, maximizing economic growth and employment.

First, through the Canadian critical minerals strategy, the government is accelerating exploration, project development and workforce capacity to increase supply of minerals essential to defence and defence technologies. In addition to the close to $4 billion announced in 2022 to support the strategy, budget 2025 also provided $1.5 billion under the first and last mile fund. That will be complemented by the $2-billion critical minerals sovereign fund, moving projects to final investment decisions faster, increasing domestic production, diversifying supply chains and strengthening national security.

The strategy also recognizes that timeliness is critical. Efforts are under way to improve regulatory efficiency and to advance projects responsibly with indigenous partners.

Second, Canada is making targeted investments to strengthen domestic processing and refining capacity to support the defence industrial value chains, including through the defence industrial strategy, which invests $443 million to develop innovative processing technologies and to support joint investments with allies.

● (1110)

[*Translation*]

Third, Canada is leveraging the Defence Production Act to stockpile critical minerals essential to defence applications and reduce supply risk.

[*English*]

Last October, the government announced it was entering into two offtake agreements. One is with Rio Tinto for scandium, which is one of the 17 rare earth elements and a key input into high-performance aluminum alloys for drones, missiles and other advanced applications. The other agreement is with Nouveau Monde Graphite for graphite, which is a key input in marine hulls and other structural components to enhance stealth capabilities.

[*Translation*]

Fourth, Canada is also working with allied countries to support the development of secure, non-concentrated critical mineral supply chains.

[*English*]

Canada and its allies understand that we cannot rely on non-market economies when they dominate global production and in turn wield these commodities as leverage for geopolitical purposes.

At the G7 leaders' summit in 2025, under Canada's presidency, leaders welcomed the critical minerals production alliance to address vulnerabilities. Since last October, Minister Hodgson has announced 56 new investments, partnerships and measures under the production alliance, including the two offtake arrangements I mentioned.

[*Translation*]

While pursuing domestic stockpiling, Canada is supporting a defence mineral stockpiling initiative with NATO partners and building its bilateral relations to secure these supply chains.

[*English*]

In closing, when it comes to addressing supply chain vulnerabilities, there is no one-size-fits-all solution. Let's go back to the examples of aluminum and scandium. Aluminum had an estimated global supply of around 73 million tonnes in 2025. It was only 80 tonnes for scandium, which is a niche mineral market with few producers and little price transparency. As such, it is more vulnerable to market manipulation.

At Natural Resources Canada, we're working closely with our colleagues at National Defence as well as Innovation, Science and Economic Development to make sure we understand the needs of the Canadian Armed Forces and the original equipment manufacturers that support them.

[*Translation*]

Thank you for your attention.

I would be pleased to answer any questions the members may have.

[*English*]

The Chair: Thank you to you both.

We'll go to our first round of questions, at six minutes each.

We'll start off with Mr. Anderson.

Scott Anderson (Vernon—Lake Country—Monashee, CPC): Thank you very much.

When Conservatives under Stephen Harper looked to the north, we saw opportunities for jobs, for indigenous partnerships and for Canada's long-term prosperity. We took concrete steps to unlock this potential by opening exploration in the Beaufort Sea, investing in critical infrastructure like the Inuvik Tuktoyaktuk Highway and giving northerners more control over their resources through devolution.

In contrast, the current government shut the door on Arctic energy with a sweeping offshore drilling moratorium in 2015. It layered more red tape on to mineral exploration and drove away investment through artificially created uncertainty. The result was lost opportunities, fewer jobs and a north that is no closer today to reaching its full economic potential, when we are in an economic and strategic emergency.

Now we are starting from a standing start, when we should have been a decade ahead. We have been on a strange, postnational flight of fancy for the past decade, and now we have to face reality. This point is important for Canadians to understand.

Ms. Chan, you mentioned leverage. I notice that Pierre Poilievre has been talking about using our natural resources for leverage for some time now. I think this is the first time I've heard it coming from the government.

How do you plan to use the materials for leverage?

● (1115)

Isabella Chan: In my opening remarks, I noted the importance of working with our allies under the critical minerals production alliance. To that very point, we have already announced a number of initiatives, with offtake agreements with our allied countries. For instance, there's the recent stockpile on the Nouveau Monde Graphite project—

Scott Anderson: With respect, how are we using it for leverage in these negotiations?

Isabella Chan: Do you mean with our allied countries under G7?

Scott Anderson: Yes.

Isabella Chan: We are positioning ourselves as a trusted supplier. From this standpoint, we are accelerating a number of our projects to ensure that we are a supplier of some of the dominated critical minerals. For instance, we are one of the few producers outside China that produces scandium. We have one of the few projects in North America that produces natural graphite.

From this perspective, we're positioning ourselves as a trusted supplier. We're also working with allies to understand their demands, and to Wendy's earlier point, we're working with NATO to understand its demands and match them up with the supply chain we're trying to diversify.

Scott Anderson: In other words, we're going to get something for this, but we're not quite sure how yet.

Isabella Chan: I would look at it from two perspectives.

Number one is that the delay in some of our projects is the investment needed to get to a final investment decision. From this perspective, with some of our allies able to put forward some of the offtakes, it supports the acceleration of projects coming online.

Another perspective is that in order for us to diversify the supply chain, which is what we've done under the G7 critical minerals action plan, we can work with our allies to look at and understand what some of the niche critical minerals markets are.

In some of these markets, the volume is so low, it's not that a number of projects need to come online. It's that the right near-term projects need to come online to secure the supply chain and diversify.

Scott Anderson: Ms. Hadwen, based on your experience, what immediate actions should the federal government take to restore confidence among mining investors who currently view Canada as closed for business?

Wendy Hadwen: On March 12, the Prime Minister announced $32 billion of investments in the Arctic. That included some infrastructure for airfields, hangars, ammunition and fuel facilities, buildings, equipment, warehousing, IT, general support and roads.

Scott Anderson: This is infrastructure, and that's great, but how are we going to restore confidence among investors who look at the legal and the environmental red tape that's tangling up these investments? How are we going to attract them and let them know there's certainty in what they're doing?

Wendy Hadwen: One step is that the defence industrial strategy publicly commits Canada to moving in this space. It specifies specific critical minerals and then commits us more broadly to the whole suite of them. Also, our work at NATO is public. In this way, we're signalling that the defence and the entire government ecosystem is orienting toward getting our products to market and putting the infrastructure in place to facilitate this. There is, of course, more to do.

Isabella, you might wish to add to that.

● (1120)

Isabella Chan: I would approach this question with a number of elements. First and foremost, investors are looking for regulatory certainty and acceleration.

From this perspective, we are working with our provincial and territorial partners to look at “one project, one review”. I would note that, to date, three provinces have already finalized co-operation agreements with us: B.C., Ontario and New Brunswick. We are also working on a number of draft agreements with Manitoba, P.E.I., Nova Scotia and Alberta. Regulatory certainty and acceleration are aspects that are attracting foreign investment, as well as private investment domestically.

Another one is the creation of the MPO, the Major Projects Office. Its intent is to accelerate projects to make a final investment decision.

Third, I would look at it from the perspective of federal investments into the mining sector. We have announced the first and last mile fund, which builds on the success of the critical minerals infrastructure fund. There have been a number of investments made to ensure not only that projects get the support they need when it comes to infrastructure but that they're also able to take the investment and get to a final investment decision faster.

I would note that the first and last mile fund and the critical minerals sovereign fund are additional tools that have been announced. We can use them to support coinvestments either with other sovereign countries or with our private investments.

The Chair: Thank you, Ms. Chan.

Ms. Romanado, you have up to six minutes.

Sherry Romanado (Longueuil—Charles-LeMoyne, Lib.): Thank you, Chair.

Through you, I'd like to thank the witnesses for being here this morning.

I'll start with Ms. Hadwen.

Ms. Chan mentioned the current conflict in the Middle East, so I'm going to focus a bit on that. In light of the current conflict and the disruption to global energy flows, what does this moment tell the Department of National Defence about the importance of resilient domestic supply chains for both energy inputs and dual-use minerals when planning for Canadian Armed Forces' readiness and allied commitments?

Wendy Hadwen: The current situation underlines all the more that the government's direction to diversify our trade relationships and to invest in rebuilding and rearming the Canadian Armed Forces is on the right path. The opportunity is for us to go a little faster.

Sherry Romanado: In terms of this, you mentioned in your opening remarks—I want to make sure I say it correctly—that not only are we part of the supply chain, we are the supply chain, because we have these critical minerals and the capacity to produce and to export.

NATO has published a list of 12 critical raw materials for defence from the defence industrial planning perspective; how is the Department of National Defence thinking about which of those materials matter most to Canada's own capability needs, and where can Canada make the strongest contribution to allied supply chains?

Wendy Hadwen: We are looking at exactly this.

First of all, I would like to say that, when we prepared this defence industrial strategy together with all our partners inside government, we began by benchmarking against 17 other defence industrial strategies around the world to see what it looks like. This is Canada's first-ever document of such a type. We read 17, and we found that everybody has something about supply chains, but we were the only country in a position to go so far as to say that we are identifying these particular minerals of advantage and that we are going to invest in getting them produced, processed and to market. This puts us in a really unique leadership role that we've translated into our leadership at NATO. The projects Isabella referred to, scandium and graphite, are two immediate ways in which we've moved to translate it into action.

When it comes to how the Canadian Armed Forces will integrate our own supply of raw materials, process and so on into our equipment, this is some work in which we're starting to identify right away, first of all, which capabilities will benefit from a domestic supply chain. In this respect, I would say that the defence industrial strategy highlights a build-partner-buy methodology.

When we are building in Canada, we have the chance to incorporate Canadian metals and minerals in the supply chain. We will be making every effort to get this to happen quickly where we have the product, aluminum and steel, which are obvious places to start. I mentioned quantum and space launch because we see opportunities there as well down the line.

● (1125)

Sherry Romanado: On that note, last week I was visiting Reaction Dynamics, which is in Longueuil. It's one of the companies that received some of the funding. It's a great company.

My next question will be for Ms. Chan.

We often focus on primary extraction, but resilience also means redundancy. How important is reprocessing and recovery from by-products and waste streams, especially for rare earths and other defence-related minerals, to Canada's long-term security and competitiveness?

Isabella Chan: Thank you for the question.

I would say that this is a very important part of building out the whole supply chain. If you can imagine, to get a greenfield mining project online, it takes, according to S&P Global, 20 years from exploration to the actual mining development and to be in production. From this perspective, we are looking at multiple parts of the value chain.

Number one is looking at some of these by-products. I note that, for instance, the by-products of zinc processing would be germanium, gallium and antimony, which are all used in defence applications and in dual use.

We're also looking at recycling. For instance, we now have Cyclic Materials, which is recycling rare earth elements. That way, we're not waiting for greenfield mining projects. We're looking at the recycling capability as well. That way, we can get some of these projects online faster to supply the supply chain in a shorter timeline.

Sherry Romanado: In that regard, if we have access to the waste or these by-products from our mining, it is much cheaper to be producing and refining those by-products than trying to identify additional deposits of critical minerals. Is that correct?

Isabella Chan: I would say that it's generally correct, in that you're basically bypassing some of the upfront investment needed to get a greenfield mining project online, which requires much enabling infrastructure.

The other end of the spectrum is the need for technology. For instance, to extract from tailings, let's say, for some of the by-products, it requires a technology to be proven. There are a number of pilot projects that we have started to look at on how we can extract from tailings or from a recycling perspective.

Sherry Romanado: Thank you.

[*Translation*]

The Chair: Thank you.

Mr. Savard-Tremblay, you have the floor for six minutes.

Simon-Pierre Savard-Tremblay (Saint-Hyacinthe—Bagot—Acton, BQ): Thank you, Mr. Chair.

I'd like to thank the witnesses for being here and for their presentations.

First, I'd like to know what critical minerals are currently being mined in Canada but sent abroad for processing.

This is for either of you, because I think you could both answer.

Isabella Chan: Since a number of critical minerals are produced here in Canada and there aren't enough plants to process them, some critical minerals are sent elsewhere for processing. I can send you a list after the meeting.

[*English*]

For example, copper is one for which I would say there's much production out of our Pacific coast that is sent over to Asia for processing.

[*Translation*]

Simon-Pierre Savard-Tremblay: The Canadian critical minerals strategy, which dates back to 2022, if I'm not mistaken, and the G7 action plan mention the government's desire to further develop the processing sector in Canada.

Could you tell us what has been done so far? It was announced four years ago, so where are we at today? Does this have to do with defence—a question for Ms. Hawden—or is it more about clean technologies, such as wind turbines, for example?

● (1130)

Isabella Chan: To be clearer, I will answer in English.

[*English*]

We recognize the need for processing capability, and I would note a couple of recent key examples that demonstrate the direction we're heading in.

Last October, we announced investments into a company called Ucore, which has the capability to process rare earth elements—specifically, gadolinium and samarium, which have a defence application. I would also note that most recently, we have been collaborating with the Province of British Columbia, as well as Alberta, to look at copper-smelting capability to build up the processing we could have on the west coast.

Those are some of the examples by which we're looking at how to build up our domestic capabilities when it comes to the midstream, as I call it, in the value chain. The issue is that when it comes to midstream processing, many of these segments are not profit-making segments. The margin in terms of making a profit is not high. As such, without much government intervention investment, they would not necessarily get into a final investment decision.

I'll turn it to Wendy.

[*Translation*]

Wendy Hadwen: Thank you very much for the question.

As to national defence, the government recognized several years ago that it had to focus on critical minerals, but it's only been in the past year that we've had the funding and an approach to move forward.

Of course, we started with the graphite and scandium projects, because we could roll them out. We do have a long way to go, so we have to start with what can be done. In our view, that means focusing on the sovereign capabilities set out in the document. We're going to be rolling those out as part of space launch projects, which we talked about earlier. We will then be able to determine what the next priorities are. So it's a bit of a marriage between what is possible in industry and current national defence needs. As far as we're concerned, we see only opportunities to do both at the same time.

Simon-Pierre Savard-Tremblay: My next question is for both of you.

In your opinion, if there were disruptions in supply chains, would the availability of certain materials be compromised? Which minerals would be the most at risk, if any?

Wendy Hadwen: Let me say first that we are seeing risks in all of our supply chains, in real time, especially aluminum, where there are a lot of opportunities. Nonetheless, we are facing a lack of reliability in the relationships on which we had built all our economic expectations.

As a result, it has become quite urgent to invest in the entire production chain here in Canada. As Ms. Chan said though, it's expensive; we will have to prioritize.

Simon-Pierre Savard-Tremblay: Mr. Chair, how much time do I have left?

[*English*]

The Chair: You have 20 seconds.

[*Translation*]

Simon-Pierre Savard-Tremblay: In that case, I won't ask any more questions.

That said, Ms. Chan, I would remind you that you said you could send us a list of critical minerals. I would therefore ask you to provide it to the committee so that we can have the information. Thank you.

The Chair: Thank you.

[*English*]

Mr. Kibble, we'll go over to you for five minutes, sir.

Jeff Kibble (Cowichan—Malahat—Langford, CPC): Thank you, Mr. Chair.

Thank you very much to our witnesses for being here.

We've heard some pretty good expressions and terms: “unique position”, “leadership in NATO”, “importance of supply chains”, “concrete steps” and “addressing vulnerabilities”. A lot of these statements, from what I'm hearing, are forward-looking plans or intentions for what we're going to do, but I'd like to look at some things we've actually done.

Currently, what do we have for stockpiles of these critical minerals? We've heard other people's testimony, but I'd like to clarify that.

● (1135)

Isabella Chan: Thank you very much, Chair, for the question.

Last October, under the Defence Production Act, we were able to identify and list under the GIC the critical minerals that we're going to stockpile. As one of the next steps following that, we immediately executed two offtake agreements, which I mentioned during my opening remarks. One is on graphite, and the other is on scandium.

Jeff Kibble: Do we have stockpiles of any of these things? I'm not talking about intentions. Do we have anything right now?

Isabella Chan: Those are live agreements that we're finalizing to be able to stockpile.

Jeff Kibble: Okay, we have an agreement, so we have a stockpile of paper.

Isabella Chan: They're actually offtakes that we have; they are term sheets that we have already signed.

Jeff Kibble: Okay, so we have term sheets and agreements, but no actual stockpiles. If we did have stockpiles, what do you think would be a reasonable amount for Canada? Is there a way to measure it? Do we want 300 pounds of something or a five-year supply? What would you consider an appropriate amount for where we should be in terms of strategic importance?

Isabella Chan: Based on my opening remarks, different critical minerals have different markets and different usage, so in aluminum, we're talking about a million tonnes, versus in scandium, we're just talking about double-digit tonnes—80 tonnes—that we're looking at.

It depends on, number one, in which part of the value chain, for instance, our domestic needs would be. Number two is looking at the global demand, especially in the advanced supply chain. Number three is looking at our capabilities in what we're able to produce.

Jeff Kibble: Thank you. It sounds as though we need a plan—a very complicated plan, obviously—to define all the different stockpiles.

As well, looking at our track record, I'd like to speak about antimony. You mentioned that as one of NATO's critical minerals. It's used for fire-retardant material and other defence applications. China produces 110,000 tonnes per year.

How much antimony does Canada produce?

Isabella Chan: I'm happy to share the exact figure in writing to the committee.

Jeff Kibble: Okay. Thank you. My understanding is that it's zero, but thank you for sharing zero with the committee. We look forward to that.

Do we have deposits of antimony in Canada? Just say yes or no: Do we have deposits here?

Isabella Chan: Yes, we do.

Jeff Kibble: We do. Terrific. Thank you.

Do we have a mine for antimony in Canada?

Isabella Chan: We have the potential for mining projects that could be developed. More importantly, antimony is a by-product of zinc processing, so it can be produced that way.

Jeff Kibble: We do have a mine, in fact, at Beaver Brook in Newfoundland. Is that correct?

Isabella Chan: It is not currently in production.

Jeff Kibble: That was my next question. It was producing antimony. It's no longer producing. It's been shuttered.

Can you tell me who owns the mine?

Isabella Chan: I'd be happy to submit that to the committee.

Jeff Kibble: I'll share with you that it's China Minmetals, which is a Chinese state-owned company. They've decided to shutter it. Now we don't produce this.

How do we protect Canadian resources that are being controlled and leveraged against us? We're saying, hey, we want to leverage these critical minerals. We have this critical mineral, but we don't produce any. We've let a foreign state company shutter our operations. The government hasn't taken any steps so far, which is a bit embarrassing.

Going forward, what steps are we going to take to protect this? I'm using this as one example of a critical mineral. It sounds like a complete failure to me. What are we going to do? How are we going to fix it?

Isabella Chan: I would say that the government takes action in a number of ways. Number one is under the Investment Canada Act, which is under the Minister of Industry. Number two, we are also working with our provincial and territorial colleagues. One of the initiatives under way is to look at the various jurisdictions in terms of their mineral acts to modernize and to update, for instance, the mineral claims regime to ensure that the domestic interests or sovereign interests are protected.

Jeff Kibble: Again, it sounds as though—

The Chair: Mr. Kibble, your 25 minutes are up.

Voices: Oh, oh!

Jeff Kibble: Oh, 25; I'm sorry, Mr. Chair. I appreciate your generosity. Thank you.

The Chair: Ms. Lapointe, you have five minutes.

Viviane Lapointe (Sudbury, Lib.): Thank you.

Ms. Chan, we've heard throughout this study that critical minerals are no longer just economic commodities but are to be considered a strategic asset. In the current context, with Iran war-driven energy, volatility and continued supply chain pressures, how does NRCan assess the link between critical minerals security, energy security and national security?

● (1140)

Isabella Chan: NRCan continues to look at the various intersections when it comes to national security and economic security from the perspective of looking at, first, the vulnerability within the supply chain. We think about which critical minerals are over 90% coming from one country. We look at what some of the near-term projects are that we can bring online faster and what some of the brownfields are that we can think about developing. We go through this exercise pretty regularly. We also use our various tools to support them. I mentioned earlier the use of the critical minerals infrastructure fund.

I would like to note that there's also the global partnership initiative, which is a program whereby we work with our allies to coinvest in projects or leverage some of the technologies that are available in other countries. I would bring to mind the Focus Graphite project, which is a Ukrainian technology that we're adopting for graphite purification.

Those are some of the tools we look at. We also continue to ensure that we accelerate where we can and that we become the trusted supplier where we have projects coming online.

Viviane Lapointe: NATO now has a list of 12 critical raw materials for defence. I'm looking at the list. Where does Canada already have real production or credible project potential? Where are the strongest opportunities for Canada to deepen its contribution to allied supply chains?

Isabella Chan: For the record, the 12 minerals are aluminum, beryllium, cobalt, gallium, germanium, graphite, lithium, manganese, platinum, rare earth elements, titanium and tungsten.

I would note that aluminum, germanium, cobalt, graphite, platinum, lithium and titanium are all critical minerals that we already produce. We definitely have a capability to scale up our gallium production. We also have a capability to scale up our cobalt and germanium production in the near term. With the ones for which we do not have current production, we have the potential to produce them.

Viviane Lapointe: Ms. Hadwen, for sectors such as aerospace, stable systems and munitions, where do you see the clearest case for treating minerals and metals as part of Canada's defence infrastructure rather than simply industrial inputs or outputs?

Wendy Hadwen: In every one of the areas of sovereign capability there is an opportunity to inject and integrate some of the Canadian supply chain. This will have different impacts on costs, but the whole point of a sovereign capability is that we think about the whole supply chain.

In aerospace, it is often a story of making materials lighter, having a better ability to manage extreme heat and extreme cold. If you think about the landing gear of airplanes, there's a lot of material science in respect to the rubber for wheels, but also the lightness. Especially now with the changing environment of oil prices, the pressure will be on to reduce the weight in all things. This gives Canada's researchers in materials science an advantage. All of these minerals and metals could have a hand in some kind of alloy development in aerospace, but in other sectors as well.

The opportunity for us is to be clear about what our priorities are and how we hope to establish an operational advantage for Canada and then translate that all the way into the supply chain.

Viviane Lapointe: I'll go back to you, Ms. Chan. You've emphasized that the whole value chain matters, not just the mines. For defence-relevant minerals, where does Canada most need additional processing or refining capacity if we want more of the strategic value to stay here at home?

Isabella Chan: Some of the members of the committee already alluded to the most important part, which is to look at what our downstream input needs are. If we were to build out the supply chain for gallium, let's say, would we go into quantum, get into the chips? Mapping out the whole value chain is one of the exercises that NRCan is undertaking right now. For instance, we now have the scandium project that we're supporting, which we have an uptick with. How do we build out the whole value chain for ourselves and look at the drone applications, let's say? How do we provide it onshore, domestically?

● (1145)

The Chair: Thank you.

Monsieur Savard-Tremblay, we'll go over to you for two and a half minutes.

[*Translation*]

Simon-Pierre Savard-Tremblay: Thank you, Mr. Chair.

I would like an update on the creation of critical mineral strategic reserves under the Defence Production Act. Also, what would the next steps be? I don't know who could best answer, but don't hesitate if you want to add something.

Wendy Hadwen: I'll begin and then hand it over to Ms. Chan.

Public Services and Procurement Canada is the department responsible for the Defence Production Act. In addition, according to Canada's defence industrial strategy, the government would like to come back with a bill that should be tabled in Parliament soon.

Simon-Pierre Savard-Tremblay: Would you like to add anything, Ms. Chan?

[*English*]

Isabella Chan: In November, we already started using the production act almost like a proof of concept. We're able to use the legislation the way it's presented for us to start the stockpiling regime. Working with our colleagues at PSPC as well as National Defence, we're doing the fine tuning necessary in order for us to accelerate the stockpiling regime as needed.

[*Translation*]

Simon-Pierre Savard-Tremblay: Does Canada currently have sufficient stockpiles to support a prolonged military effort, such as if it had to participate in NATO operations?

My question is more for the official from the Department of National Defence, but I also encourage the official from the Department of Natural Resources to answer if she wants to add anything.

Wendy Hadwen: As to some of Canada's advantages in industry, such as in vehicle production or the aerospace sector, we have already integrated a lot into the supply chain. Nonetheless, the circumstances surrounding the operational requirement for the Canadian Armed Forces prevent me from determining exactly what we'll need.

That said, we are preparing for the future, when we will need the chips that Ms. Chan just mentioned, or space launches. That's why we're focusing on the sovereign capabilities set out in the document.

[*English*]

The Chair: Mr. Bezan, you have five minutes, sir.

James Bezan (Selkirk—Interlake—Eastman, CPC): Thank you, Mr. Chair.

I want to thank our witnesses for joining us today.

Ms. Chan, you had talked about the 12 critical minerals. Some of them we produce, and some we do not. Which ones are we not currently mining?

Isabella Chan: Beryllium, tungsten and manganese are the three that we are not currently mining. That being said, we have the potential and advanced projects that could come online. For instance, I use tungsten as an example. We have two advanced projects domestically.

James Bezan: We have significant deposits that would be worth pursuing, the mining and development of those resources, and then using them for leverage, as you mentioned before.

Out of the remaining nine, how many of those do we produce in significant quantities, including the downstream refining and manufacturing? How many do we require our allies and/or competitors to develop?

Isabella Chan: I'll answer the question in a reverse way, from your last point.

When you look at many of these critical minerals, they have over 50% coming from one single country. There is a general recognition that we need to diversify the critical mineral supply chain from that perspective because we have seen export controls, export bans, for some of them, which resulted in a disruption in the manufacturing in some of the EV batteries at one point, for instance. From this perspective, not just Canada but our allies as well are looking to build up every part of the supply chain, from the upstream—where it comes from either byproducts or the mining—all the way to the processed product.

The other challenge we're seeing is a lack of technology. For rare earth elements, for instance, or even lithium processing, outside China there are not a lot of capabilities when it comes to rare earth separation or converting lithium into lithium hydroxide. There's also an imposition of export control at one point from China.

● (1150)

James Bezan: We talked about direct foreign investment. That also includes from non-market states, like the People's Republic of China.

As Mr. Kibble pointed out, there is a mine that's been shuttered in Newfoundland. That is one of the critical minerals identified by NATO. That one is called China Minmetals.

In Manitoba, we also have Sinomine, which had held major resource licences in the Ring of Fire. They still own a mine in Manitoba, called Tanco; it produces tantalum, which is on the critical minerals list, along with cesium and lithium. All that is being shipped to China in the raw form. I know that cesium is not on the list, but 75% of the world's cesium comes out of the mine north of Lac du Bonnet.

Should we be talking about making sure that Canadian companies, or at least our allied nations, are making those direct foreign investments rather than our competitors, such as China?

Isabella Chan: I would note that the Investment Canada Act allows us to look at investments in Canada. It is under the Minister of Industry's purview, so I won't comment too deeply, but I recognize that they have the ability to look at investments in Canada.

James Bezan: Ms. Hadwen, as we look at getting these critical minerals produced and getting ownership of them, we know the Department of War in the United States is making direct investments in mining and refining operations in allied nations, including in Canada.

Will we be making use of our own Defence Production Act to make those direct investments? How do we feel about other allies having ownership stakes in those mines and refining processes in Canada?

Wendy Hadwen: Thank you for the question. I'll make a start, but Isabella will be more specific.

The defence industrial strategy sends a very strong policy signal about our intention to build in Canada and our commitment to making the most of our supply chain. Some projects are more mature than others. This document is just over a month old. We will be prioritizing as we roll out the implementation. As Isabella mentioned, scandium and graphite are already good news stories. She has helped the government move very quickly.

I'll let her provide some more detail on equity stakes.

Isabella Chan: For the two transactions related to the Rio Tinto scandium project, the Canada Growth Fund came in and invested in the project through an artificial equity coupled with the offtake agreement to go into our stockpile.

Similarly, the graphite project was an equity stake for the Canada Growth Fund, with the defence stockpile as the offtake.

With the announcement of the critical minerals sovereign fund, we expect we will look into more investments to ensure the best value for the investments we make, not just in upstream but also in midstream processing.

The Chair: Thank you, Ms. Chan.

Mr. Malette, you have five minutes, sir.

Chris Malette (Bay of Quinte, Lib.): Thank you, Chair.

Let's have a little clarification on some of the points raised.

I would note that the 2009 sale of the Beaver Brook mine—which has come under a bit of discussion today—was, in fact, under the leadership—or prime ministership—of Prime Minister Harper. I might also note that Inco and Falconbridge were both sold to foreign interests under Prime Minister Mulroney. These historic sales are nothing new.

I would like to direct my first question to Ms. Chan.

We heard a statement presupposing that there is no international interest in investing here. Could you clarify this? Do we in fact have international investment and, if so, where and pertaining to what particular areas?

● (1155)

Isabella Chan: To give you an illustration or example of foreign interest in Canadian critical minerals projects, I would refer you to the now 56 in total announcements made under the critical minerals production alliance that include offtakes from a Belgian firm, from Japanese companies and from a number of EU member states.

As in my earlier point, there is recognition of the need to diversify the supply chain and ensure that trusted allies who are suppliers can bring their projects online.

Chris Malette: My next question is for both Ms. Hadwen and Ms. Chan.

Canada is strong in extraction but still developing its processing capacities. What concrete steps would you say are being taken to build refining capacity domestically?

Wendy Hadwen: From a strategic point of view, the defence industrial strategy positions us to support this with a defence partnership, which could be everything from funding to collaborating and deploying—where it makes sense—all the resources we might need to take advantage of the supply chain opportunity we have in Canada.

This is new for us, of course. What you have is the beginning—the outlining of this policy interest on the part of all ministers related to the defence industrial strategy.

Isabella...?

Isabella Chan: One example I could give is this: Earlier in my remarks, I noted the $443 million that was announced under the defence industrial strategy specifically for minerals processing. One investment we've already announced is for the gallium out of the aluminum site of Rio Tinto. Gallium could be produced as a by-product of aluminum processing. We are not only building up the processing but also now adding to our capability when it comes to gallium production.

Chris Malette: I believe I have time for one more question. I guess it would be for Ms. Chan, and Ms. Hadwen can choose to comment as well.

This is further to your comments on the last round of questioning. Rare earth elements remain a particularly sensitive file, given the concentration of global supply and the continued uncertainty created by Chinese export controls and licensing. What are the most practical steps for Canada to strengthen its position in rare earth extraction, processing and recycling? Parts of this have been touched on here and there, but could you distill that?

Isabella Chan: I would say that we're putting efforts into every part of the value chain from mines to magnets, I'll call it. Number one is a number of greenfield mining projects that we have invested in. I'll note that Torngat and Defense Metals are being tracked, and for instance, Defense Metals is also being tracked by the B.C. government.

When it comes to separation and processing, we have invested in the Saskatchewan Research Council, as well as in what I noted earlier in terms of Ucore, which has separation capability. With regard to the recycling, I mentioned the capabilities of Cyclic Materials, which have the recycling capabilities that we have invested in. We're trying to build out every part of the value chain when it comes to rare earth, recognizing that it is a vulnerability.

● (1200)

The Chair: Thank you, Mr. Malette.

Thank you to the witnesses.

We're going to—

James Bezan: I have a point of order, Mr. Chair.

This is the last time we're going to have government witnesses in front of us, and I think we had some comments around strategic stockpiles. It's important for us, in order to do our work, to know what those strategic stockpiles look like. How much of each critical mineral do we have, and how do they make that determination? Is it what Canada needs? Is it what our NATO allies need?

We can ask them to submit it in writing since this will most likely be our last meeting on this. We need information on how they determine those stockpiles.

The Chair: Ms. Chan, is this possible? Could you report back on some of the issues that are being—

James Bezan: Also, who pays for it?

Isabella Chan: Yes.

The Chair: I suggest that we suspend the meeting. The witnesses are welcome to stay. We're going to have another witness come on immediately following this. I'm going to suspend for a moment to do the techie stuff to get her on.

● (1200)

_____(Pause)_____

● (1200)

● (1205)

The Chair: We're resuming our meeting. We were just suspended.

I'm introducing Cristina Pekarik, who is an economics and resource policy expert.

On behalf of our committee, I appreciate your being here.

I would like to give you up to five minutes for your opening statement.

Cristina Pekarik (Economics and Resource Policy, As an Individual): Thank you very much, Mr. Chair.

It's great to see you.

Good afternoon. My name is Cristina Pekarik, and I am appearing today as an independent expert.

I recently retired from the Yukon government following a 32-year career in the Yukon, most recently in the position of senior planner and chief economist for Energy, Mines and Resources.

My focus today is on the economic policy and fiscal aspects of critical and strategic minerals. I want to thank the committee very much for inviting me to appear today in what really is a moment of strategic reckoning for critical minerals and the defence-national security nexus.

My testimony today makes one central argument: Canada's originating 2022 critical minerals strategy was built with its focus on energy transition. The world has changed. There have been action plans emerging that take more account of the defence framework. We now need a framework that is purpose-built for defence, sovereignty and fiscal capacity, and those things are not the same.

The committee has heard extensively about critical minerals and defence supply. What has not been addressed is the fiscal dimension: that critical and strategic minerals revenue may be one of the most direct tools available to Canada for financing the defence commitment we have made to our allies. What I want to leave you with today is the fiscal case around critical and strategic minerals.

Canada has committed to spending 5% of GDP on defence by 2035. The Parliamentary Budget Officer, in his report of February 5 of this year, tells us this means an additional $33.5 billion per year on average. As we know, this is also in the context of a projected $78.3-billion deficit this year. Furthermore, the Parliamentary Budget Officer has projected that annual deficits will average approximately $64 billion out to 2030, for the foreseeable horizon.

To finance a near quadrupling of defence spending, Canada has four options: borrow more, raise taxes, cut programs or grow revenue. I am here to make the case for the fourth option.

Critical minerals currently contribute $40 billion to Canada's GDP. Scaled strategically with a deliberate commissioning pipeline, competitive investment conditions and allied market demand, this revenue base can grow materially. Failing to treat it as a financing instrument for defence leaves one of our most significant strategic levers unused.

In terms of setting this framework, I identify seven categories of measures in the detailed brief that has been submitted. Here, I am going to flag four as the most salient.

First, I recommend that the committee consider asking the Parliamentary Budget Officer to model a pipeline of critical and strategic mineral projects, as well as a commissioning schedule for this pipeline of projects. This should be tied to two scenarios.

The first scenario is what it would take to generate the revenue to meet the $33.5-billion annual defence growth target. The second scenario is what revenue and what pipeline of projects it would take to cover Canada's total defence spending.

This gives the committee an evidence base for action and signals priorities to the Major Projects Office, the role of which was discussed here this morning.

Second, execution timelines become the binding constraint. Mine development averages 15 to 16 years from discovery to production in Canada, and we know that in terms of alignment with our major competitors for mining investment, timelines take up to 26 months longer on average for project commissioning.

A defence imperative requires us to ask, what does “expedited” actually mean?

● (1210)

Federal-provincial equivalency agreements, some of which are under pre-assessment scheduling, and AI-assisted regulatory databases are some of the tools that I cover in more detail in the brief as measures to really improve or that will align with the new definition of “expedited”.

Third, foreign ownership gaps are a documented intelligence risk, and not a theoretical one. CSIS has named China's critical minerals acquisition strategy as a direct national security concern.

The Tanco mine, which has been mentioned this morning, is 100% Chinese-owned, and it holds 60% of the world's known cesium reserves. The Beaver Brook mine, an antimony mine, also mentioned here, has been idle since 2012 under Chinese ownership, while last year manufacturers declared *force majeure* from antimony supply shortages.

These are not edge cases. They are symptoms of a screening regime with gaps that the Investment Canada Act regulations must close. Regulations are under development, so there is a very strategic and timely role for the committee to play.

The Chair: Ms. Pekarik, wrap it up soon. We're over time.

Go ahead.

Cristina Pekarik: Fourth, Canada has no strategic mineral stockpiles, as discussed here. Indigenous partnerships and federal-provincial partnerships are key.

In closing, Canada's critical minerals are not merely an economic opportunity. In produced, refined and processed form, they are a strategic asset and a financing instrument for defence we're not yet using deliberately.

I ask the committee, then, to do five things: modernize a critical minerals strategy to align with the defence imperative; integrate defence fiscal capacity as an organizing principle; manage execution risks in regulation, investment and workforce; build the indigenous and allied partnerships that this strategy requires; and finally, close the security and supply disruption gaps before they become crises.

Our allies are not waiting. The window to act with strategic intention is now.

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

The Chair: Thank you. I apologize for that. We just wanted to maintain the time.

Just a moment. I have Mr. Savard-Tremblay.

[*Translation*]

Simon-Pierre Savard-Tremblay: Mr. Chair, I would like to point out the following.

I don't know if this is the case for my colleagues, but I haven't received the document in question, that is to say the brief the witness is referring to. I don't know if we can make sure that it has indeed been sent and received. I haven't received it, and some of my colleagues are signalling that they haven't received it either.

Can we make sure we get that document?

[*English*]

The Chair: I believe it's being distributed and translated concurrently.

[*Translation*]

Simon-Pierre Savard-Tremblay: So it's not unusual for us not to have received it.

[*English*]

The Chair: Mr. Kibble, it's over to you, please.

Jeff Kibble: Thank you for your statement, Ms. Pekarik. I appreciated it.

I wanted to ask you a quick question. You talked about critical and strategic minerals sort of interchangeably. Would you consider gold or fuel minerals and strategic or critical minerals or both?

Cristina Pekarik: Coming back to how we would go about what would be the portfolio to draw upon for critical and strategic minerals, it would go back to—as I would suggest that the PBO analysis, if requested, would—our NRCan national major project inventory.

Yes, that includes strategic minerals, and looking at this defence fiscal capability, building the defence capability would potentially include gold and other minerals, as well as mineral fuels. It's worth noting that we have a mineral fuel—uranium—on Canada's list of 34 critical minerals.

Potentially, this means adding oil and gas projects, because certainly they have the potential to build out fiscal capacity in terms of federal government revenue associated with the development of those projects. If you track back to the project inventory, which has over 500 mineral and mineral fuel projects on it, it would include those, yes.

Jeff Kibble: Moving on, you made a comment about supply disruption gaps, and we talked about Beaver Brook and the other facility. What specific steps could we take to protect Canadian critical minerals from foreign interference, as we've seen? I think this is really important.

● (1215)

Cristina Pekarik: The Investment Canada Act regulations are currently under development. There are two areas in which the committee could play a key role in what those regulations look like in order to protect our critical and strategic mineral interests.

The first is to define what those sensitive sector projects are. If you include the pipeline list and include all the projects identified as critical and strategic mineral projects in the sensitive sector definition, it would automatically trigger reviews on any transactions that occur in relation to those projects. The sensitive sector definition is really important, because it would remove all the thresholds that typically apply for triggering an Investment Canada Act review.

The second issue—and this came up earlier in the questioning—is the grandfathering aspect. Once you've done a review under the Investment Canada Act, triggering a secondary review seems to be a bit of a speed bump. Removing this speed bump would mean you don't grandfather projects. Because the defence environment is a dynamic environment and securing supply chains for those critical minerals is very important, you would potentially come back and review again with new investment transactions. You'd be preventing the grandfathering clause from landing us in situations of manufacturers declaring *force majeure* because they can't procure the supplies, as happened, for instance, with Beaver Brook. You would come back and re-review those kinds of projects.

Jeff Kibble: I believe I have a few minutes left.

I agree with your assessment that a 5% GDP commitment is a pretty major commitment. You outlined some of the costs going forward over the next few years. It sounds very ambitious, especially relative to the other OECD countries. Do you have any suggestions to try to scale the revenue?

Cristina Pekarik: Yes. Last fiscal year, Canada's defence spending commitment was 1.37% of GDP. Let's recall that Canada has not even been spending in the range of 2%. I believe that in the mid-sixties, it was just over 2%, but we have not seen that scale of investment in defence in Canada for many decades.

We're now moving out to cover this ground and reach 5% within the decade. This is absolutely a major commitment in providing this fiscal anchor to our mineral and mineral fuel potential and securing the investment in order to scale and meet our defence spending commitment with new revenues, because for every investment dollar, the federal government gains revenues associated with it.

Jeff Kibble: I have only a few seconds left, so maybe you could quickly answer what we need to do to actually start building stockpiles. We've heard some signalling about it, and some positioning, but what concrete steps can we take to make a stockpile?

Cristina Pekarik: We have the authority under the Defence Production Act. Perhaps there's further modernization that is legislatively required.

A really key role is in what it looks like NRCan is going to do, which is to model out what we need. With our allies or within the allied community, what do we actually need to do? We're looking at scaling defence spending and investments and building out the capacity for defence. The background analysis from NRCan is going to be really important to set those and set what we need. Potentially, this needs to be set in legislation or in regulation.

The Chair: Thank you, Ms. Pekarik and Mr. Kibble.

Mr. Watchorn, you have six minutes, sir.

[*Translation*]

Tim Watchorn (Les Pays-d'en-Haut, Lib.): Thank you, Mr. Chair.

Thank you, Ms. Pekarik.

I think the initial premise of your argument is the increase in revenue. You talked about an additional 33 billion dollars in revenues from the critical minerals supply chain.

I would like you to tell us exactly what the three best strategies are that the government is going to focus on to reach the $33 billion in revenues.

● (1220)

[*English*]

Cristina Pekarik: I'm proposing that the committee ask the Parliamentary Budget Officer to go back to that. We have a project list, and it is the national inventory. Provinces and territories identify the major projects that are advancing, and we have 500 projects on that list, whereas the Major Projects Office right now has been referred only 15, and last week there were three new projects added. Covering that ground, the Parliamentary Budget Officer would take a screen on those 500 projects and say, “These are the projects we need to see to investment. These projects need to be commissioned”. Furthermore, we need to see this schedule for final investment decisions and for, frankly, shovels in the ground on these projects in order to reach the target. This is the analysis the Parliamentary Budget Officer can provide to the committee.

[*Translation*]

Tim Watchorn: I would like to hear your opinion on the government's recent investment in the Nouveau Monde Graphite mine in Quebec. A line of credit has just been granted to increase graphite production in Quebec. What do you think of this government investment?

[*English*]

Cristina Pekarik: I'm not going to comment specifically on the project, because I'm not sufficiently familiar with it to offer anything right now. I can follow up in writing. Certainly Canada's federal government has set up some measures in order to participate in an equity participation, taking an equity stake in some of these projects. That is a potential role for the government.

There is another role the government could take, which is this: When it comes to those very critical minerals, there could be, when we're talking about processing and refining, a role for government to have a minimum processing requirement within Canada. This is because we are trying to build out, as opposed to shipping offshore, to try to build our processing and refining capacity. That could potentially be a strategic role for government to take, and this could be done under the Defence Production Act. Without pretending to be an armchair lawyer, I'd say that this is potentially something that can be done.

[*Translation*]

Tim Watchorn: I'm going to continue along the same lines.

In Quebec, we are fortunate to have a copper supply chain through Glencore, which owns the Horne Smelter and the CCR refinery. If the provincial government in Quebec decided not to make the investment, do you think the federal government should get involved in saving the entire copper industry in Quebec?

[*English*]

Cristina Pekarik: There is a potential role, and certainly that seems to be what the Defence Production Act was envisioned to do, the defence imperative, which is exclusively a federal responsibility. Of course, because it's resource management, the constitutional division of powers ideally makes it a partnership. There's room for collaboration and for this defence imperative to have more work done at the Council of the Federation and at the Energy and Mines Ministers' Conference. These are critical forums for building this co-operation.

[*Translation*]

Tim Watchorn: Thank you, Mr. Chair.

[*English*]

The Chair: Mr. Savard-Tremblay, you have six minutes, please.

[*Translation*]

Simon-Pierre Savard-Tremblay: Thank you, Mr. Chair.

Ms. Pekarik, thank you for being here and for your presentation. We'll read your document with interest.

We know that getting projects built in the north is not easy. It's not next door. So distance is already a challenge. In addition, population density is low. There are probably additional costs because of the distance. Similarly, the infrastructure might not be as well-developed as it could be, but correct me if I'm wrong. There is also the climate, which means that the north is not accessible to everyone.

Does all of this mean that there are real and significant obstacles to the development of the critical minerals industry in that region?

● (1225)

[*English*]

Cristina Pekarik: Yes, there are obstacles, but there are also opportunities. Canada's geological endowment is unparalleled. However, research going back 10 years, which was completed by the Mining Association and PDAC, indicates that the cost of commissioning a project in the north can be up to two and a half times more expensive to complete. Canada had committed earlier to a number of commitments for infrastructure development. We've seen a recent articulation of further commitments to infrastructure development.

When it comes to infrastructure, as with the mine project reviews themselves, we see delays. We're going to have to get at this definition and measures to expedite. In terms of getting at infrastructure development, as an example—you touched on this point—it needs to happen in a timely way. We have commitments from the federal government for resourcing infrastructure development, which are getting delayed or stranded because there isn't the execution on getting those infrastructure developments done. Yes, it's very important, but execution is critical.

[*Translation*]

Simon-Pierre Savard-Tremblay: Let's say we have a 10-year horizon. What investments would be needed to achieve those objectives?

[*English*]

Cristina Pekarik: I wouldn't be able to quantify this. It would depend on the basket of projects, on which projects are approaching final investment decisions and which are getting through the assessment and regulatory processes—and, to backtrack, on what priorities and opportunities are being identified by NRCan through the screen they're applying. It's very specific, but there are nodes and there are areas that are already identified. Certainly, in Yukon, we have specific areas in the east, in the west, in the gold fields and in the Casino mine project, which is a potential copper-molybdenum-tungsten project. This has become much more strategic, given the current defence imperative.

[*Translation*]

Simon-Pierre Savard-Tremblay: I understand that there's an opportunity, but we also know that a number of countries produce at a lower cost, including China, which is a major systemic rival. Can we really anticipate that production would be competitive? Would that be reasonable and feasible?

[*English*]

Cristina Pekarik: It's going to be critically important for us to look at not just escorting projects through our existing assessment and regulatory systems to make gains where we can, because we can control only what we can control. The federal government has control over how it fulfills its management function in relation to assessment processes, and provinces and territories manage it in relation to resource management, so making gains....

A lot of things can be done that are not particularly new. We are already seeing some effort to have an equivalency. Right now we have two assessment processes: the federal process and the provincial process. Making equivalencies so that you have only one assessment process: This is something that's known and that can and should be done. In the Yukon, we have only one assessment process, but our timelines are no better; perhaps they even scale upwards compared to other parts of the country. We have to manage for things like scope creep on projects and have pre-assessment timelines—"time is money"—that add to our being able to execute in a timely way and be competitive.

Another recommendation that I have provided is to further ask the Parliamentary Budget Officer to do a sensitivity analysis on that bundle, that pipeline of projects, which looks at how sensitive those projects are to investment. It's very much to your question about tax measures, the capital cost allowance, or about taxes, excise taxes and things like the industrial carbon tax. How do we compare, for instance, to Australia, to other investment destinations, where we're also looking for partnerships on critical minerals supply? We also, of course, are competitors, with places like Australia, for investment dollars. In some areas—you mentioned China—we are not going to compete because of our labour standards and so on.

● (1230)

The Chair: Thank you.

Ms. Gallant, go ahead, please.

Cheryl Gallant (Algonquin—Renfrew—Pembroke, CPC): Ms. Pekarik, Canada has never been able to achieve the economy of scale to make processing here profitable. What do you see that has changed?

Cristina Pekarik: It will depend on our production and potentially on our ability to incentivize investment and do the research and development. One of your previous witnesses talked about the investments in research and development, as well as opportunities for reprocessing. Those are the kinds of things that potentially allow us to get us to sufficient scale for refining and processing.

Those strategic investment arrangements with our allies in the minerals partnership, which includes a 12-nation partnership that Canada was a lead on, are a strategic place to look for those kinds of opportunities.

Cheryl Gallant: Earlier, we had Mr. Balsillie, who said that the real financial benefit is the IP developed for extraction and processing.

Do you know if any defence and research development in Canada is working on the IP for extraction and processing?

Cristina Pekarik: I listened to Mr. Balsillie's testimony.

This is a more universal issue with Canada protecting IP. Mr. Balsillie is very well placed, through lived experience, on the consequences of not having a strong IP.

IP is integral. Protecting our IP for refining and processing, and for the scientific and technological development that precedes it, is critical to the whole ecosphere.

Cheryl Gallant: What is the strategy to build the capacity for Canadian scientists to develop the IP?

Are we going to ship it back to China or the United States for pennies and then pay millions to get it back, or are the regulatory restrictions going to change?

Cristina Pekarik: I'm sorry, Ms. Gallant. I missed the first part of your question.

Cheryl Gallant: What is the strategy to build the capacity for Canadian scientists to develop IP? Are we going to continue doing what we've always done, which is getting the ore, shipping it to China and paying more to get it back?

Cristina Pekarik: To the extent that we're able to capture—through IP protection measures, potentially through processing requirements under the Defence Production Act and through producing—enough that we can attract the investment, the investment becomes attractive for processing and refining. Those are the kinds of strategies that will position us for processing in Canada.

It was observed this morning that we are exporting the raw material to China for processing and then importing the finished product.

Cheryl Gallant: What physical evidence is there that anything is really going to change from the way things are being done now?

Cristina Pekarik: Part of my recommendation for building this defence fiscal capacity anchor is about signalling and working with the Major Projects Office, for instance, to get through a number of critical changes to accelerate our pathway. It is a multipronged, multistep process. It's ensuring the accountability is being met to a defence imperative as opposed to the current context that we have experienced.

Over the last 10 to 15 years, for instance with review processes, the timelines were always built out. They now have to scale back, and our competitors are setting the benchmark. The United States, for instance, through changes to NEPA, is scaling the scope of investment and downstream permitting to be very specific to the project, whereas we have things that have grown out in which we have multi-year research programs being conducted on a multitude of things, with tens of thousands of pages for submissions.

I understand that the United States is looking at 150 pages for submissions. That's a very different universe from the multi-year research programs and tens of thousands of pages of documentation that we currently experience.

● (1235)

Cheryl Gallant: Are you aware of any permits for critical minerals extraction that have been issued in the last year?

Cristina Pekarik: No, I'm not familiar with the full universe across Canada, so I can't answer that question.

Cheryl Gallant: Iran is denying safe—

The Chair: I'm sorry, Ms. Gallant.

Ms. Lapointe, it's over to you for five minutes, please.

Viviane Lapointe: Thank you, Ms. Pekarik, for appearing here today. We've heard a lot about the importance of critical minerals to Canada's security and economy. From your experience in resource policy, what are the key factors that determine whether a project moves from concept to production?

Cristina Pekarik: Project economics is crucial. First nations partnerships are absolutely critical. The vast majority of the Yukon is covered by modern treaties with first nations. We have somewhat of a different universe in other parts of the country, like British Columbia. Certainly, on equity participation, or actually ownership, we had a producing copper mine that was on first nations category A settlement land, so the first nation owned the mines and minerals. The administrative structure, which had been administered by the Yukon government, worked very effectively. Royalties were payable under the existing royalty regime to the first nation. That was a successful model for participation. The training and employment opportunities, as well as equity participation and first nations participation in the pre-assessment, assessment and permitting processes are the critical ingredients for getting to go.

I would suggest that this work, in terms of bundling the pipeline to finance Canada's increased defence commitment, provides a potentially very good foundation to engage with first nations. This is the pipeline of projects that we need to meet our objective. Let's engage on the whole bundle of projects as opposed to sequentially, individually, dealing with them. Let's have a complete framework.

Viviane Lapointe: From an economic and a policy perspective, what makes a critical minerals supply chain truly resilient beyond having the resources in the ground?

Cristina Pekarik: From my understanding in terms of meeting the defence interests, the vulnerability is not only in the production but also in the processing and refining, and securing for disruptions, which is what stockpiles are all about. We have seen this very recently with the Beaver Brook antimony, for instance, but we're also seeing it now in the Middle East with respect to disruptions for mineral fuels for oil and gas.

Viviane Lapointe: In terms of the full mining value chain, including processing and recycling, where do you see the biggest opportunities for Canada to strengthen the full system in a real and practical way?

Cristina Pekarik: They are being touched on in these hearings. Along the value chain, there are many opportunities. There are opportunities in academia and research and development, and in technology and commercial deployment. There are many steps along this value chain. Reprocessing of tailings is certainly much closer at hand, for instance. There are going to be some complexities, potentially, that are not the same as those that greenfield development presents, but they may be more timely. There are many opportunities. NRCan has the role and the function to map all the projects in Canada, and now potentially remapping them around the defence imperative is the next step for them.

● (1240)

The Chair: You have one more question.

Viviane Lapointe: We're certainly seeing an increasingly uncertain global environment. How important is it for Canada to have greater control over the different stages of the critical minerals value chain? Where would this matter most in practice?

Cristina Pekarik: As your colleague across the floor was alluding to, the processing and refining is a key factor. I believe it's 70%, on average, located in China for processing across the spectrum of critical minerals. Simply producing the minerals or the concentrates is not sufficient; filling the gap in refining and processing is also important.

The Chair: I appreciate it, Ms. Lapointe.

Mr. Savard-Tremblay, you have two and a half minutes, sir.

[*Translation*]

Simon-Pierre Savard-Tremblay: Thank you, Mr. Chair.

Ms. Pekarik, I'm going to ask you a number of questions and raise a number of points. You can summarize in your answer.

First of all, the Yukon Conservation Society has said that development in Yukon is not sustainable. It has said Yukon's mining system does not meet sustainable development standards, that the mines are bankrupt and abandoned, and that those mines have left a lot of environmental contamination. That is the first point I wanted to raise.

Now I'm going to draw a parallel with consultations with the first nations in that region.

First of all, would you say that their free and informed consent was obtained?

Next, let's look back in time. In June, a major leaching system failure caused significant contamination at the Eagle Gold mine in Yukon. In 2025, the release of water containing copper and other contaminants was allowed, even though it exceeded regulatory limits. In light of that, can you say that the first nation that was a victim of this incident was consulted?

[*English*]

Cristina Pekarik: Under the modern treaty framework in the Yukon, there is participation, and a single review regime was developed, which includes full first nations participation.

I am going to have to demur on any details regarding the Eagle gold project. Because of my oath of office as a retired public servant of the Yukon government, I do not have the privilege of discussing this project.

[*Translation*]

Simon-Pierre Savard-Tremblay: I find that interesting since you are here and have a fairly clear idea of development in the region. You're saying there's a good consultation process. What's unfortunate though is that you can't speak to the example I'm giving you, although there were clearly very significant breaches and victims. Forgive me, but I have to say that's a bit of an easy answer.

[*English*]

Cristina Pekarik: I'm not trying to give you an easy response. I respect the oath I took as a public servant, so I have to defer to that.

I observe that there is a consultation framework set out as part of the Yukon environmental and socio-economic assessment process. This doesn't mean that all the consultation and interests behind that consultation—the interests of first nations—are necessarily going to be fulfilled in the assessment process. There are interests in employment and training. There are interests in terms of equity participation. Those are the kinds of things that early engagement and partnership are critical to ensuring.

The Chair: Thank you.

Mr. Anderson, you have five minutes, sir.

Scott Anderson: Thank you very much.

You've been watching this for most of your working life—

The Chair: Mr. Anderson, you probably have only one question. I just realized the time.

Scott Anderson: I have one question.

How would you suggest changing the permitting timelines, which we already know are slow and costing us investment in the mining sector?

● (1245)

Cristina Pekarik: What I have proposed by developing this pipeline.... There's progression here. Developing the timeline for securing our fiscal capacity to finance defence is step one. Putting together the schedule to generate government revenue is step two. Transmitting it to the Major Projects Office....

Right now, the Major Projects Office is still forming and norming. With the directives to the Major Projects Office to achieve certain targets for timelines and for execution, and there are a number of measures.... As I said, these things are not unknown in the assessment and permitting universe, from the equivalency to getting rid of stop-go timelines.

We have timelines for project assessment, but then we have stop-go on the clock. That's what we've developed around this. It effectively adds to your timelines.

It's about making sure that the scope of project assessment is focused on the project itself and the features critical to achieving environmental protection and socio-economic objectives. Focus on those things and the principle of using the best available knowledge to complete an assessment and regulatory process, as opposed to engaging in multi-year research programs.

Those kinds of things will allow us to more effectively meet expedited timelines for meeting the resource management and regulatory requirements.

The Chair: Thank you, Mr. Anderson.

Thank you, Ms. Pekarik. I appreciate your being before us to talk about the importance of the defence industrial strategy, critical minerals and our overall ability to protect our sovereignty , as well as to stimulate economic growth and take advantage of what Canada has to offer.

Before we go in camera, does the committee agree that the parliamentary interns can stay for our in camera component? If the committee agrees, it is optional to amend the routine motion governing staff presence at in camera meetings to include the PIPs. Is that okay too?

[*Translation*]

Simon-Pierre Savard-Tremblay: Mr. Chair, since I haven't heard the interpretation yet, I can't answer that question.

Tim Watchorn: Do you agree that the interns can stay for the in camera portion of the meeting?

Simon-Pierre Savard-Tremblay: Okay.

[*English*]

The Chair: Ms. Romanado, go ahead please.

Sherry Romanado: I want to know what the ask is. Is it for them to stay as a part of this...?

The Chair: There are two asks. One is for them to stay for the immediate in camera meeting, as we'll go in camera in a moment.

Sherry Romanado: I'm fine with that, but with respect to all blanket in camera meetings, I'm not quite sure. It would depend on the subject.

The Chair: That's fair enough.

We won't proceed to that effect, then.

James Bezan: We could do it case by case.

The Chair: We'll do it case by case. That's understood.

I'll now suspend the meeting, and we will proceed in camera.

[*Proceedings continue in camera*]