

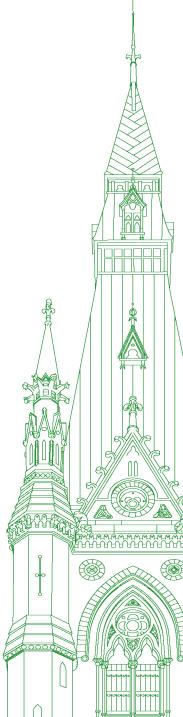
43rd PARLIAMENT, 2nd SESSION

# Standing Committee on Natural Resources

**EVIDENCE** 

# **NUMBER 016**

Friday, March 12, 2021



Chair: Mr. James Maloney

# **Standing Committee on Natural Resources**

# Friday, March 12, 2021

**(1300)** 

[English]

The Chair (Mr. James Maloney (Etobicoke—Lakeshore, Lib.)): I call the meeting to order.

I'm going to be a bit self-serving here and start by wishing everybody a happy Irish heritage month. It's the first Irish heritage month in Canadian history as of Wednesday, March 10, something in which I take great personal pride.

Welcome, everybody. Thank you for joining us today. This is the 16th meeting of the Standing Committee on Natural Resources.

Before I welcome all of our witnesses joining us today, I should thank some substitute members who are joining us today: Mr. Lauzon, Mr. McDonald and Ms. Falk.

We are going to proceed to our witnesses. In compliance with our motions that we passed at our last meeting, all of the witnesses have been sound checked; their headsets are working and translation services have been tested. Everything should be compliant, so we shouldn't have any difficulties.

On that note, to our witnesses, you are free to and encouraged to speak in either of the official languages. There is translation at the bottom of your screen for the benefit of others and for your own benefit. Make sure you have that accessible. We are doing this on Zoom. All of us on the committee are used to doing this now.

For our witnesses, sometimes it takes a little bit of patience, because there may be a delay particularly if translation is taking place. I would ask everybody to wait until the other person is finished speaking before answering or asking a question, as the case may be.

If you have any difficulties, please feel free to speak up. My job is to marshal us through the meeting, and I will give you advance warning. It often includes cutting you off if we go past the allotted time for your speaking slot, or for the time you've been allocated for asking or answering questions. I apologize in advance.

I would like to welcome our five groups of witnesses today. We have BMO Capital Markets, Cameco Corporation, Fonds de solidarité des travailleurs du Québec, Torngat Metals and Vale Canada Limited.

Thank you, all, for taking the time to be here today.

Each group will be given up to five minutes to make initial remarks. At the conclusion of the remarks from all of the witnesses, I will then open the floor to questions from committee members.

Why don't we follow the order on the agenda.

Mr. Bahar, from BMO Capital Markets, you may lead us off.

Mr. Ilan Bahar (Managing Director and Co-Head, Global Metals and Mining, BMO Capital Markets): Thank you, Mr. Chair.

Bonjour. My name is Ilan Bahar. I am the co-head of BMO Capital Markets' global metals and mining group in investment and corporate banking. Thank you very much for inviting me to speak with you today. We at BMO greatly appreciate the opportunity to take part in your committee's timely study.

As you know, mining is a cornerstone of the Canadian economy. The contribution of the minerals sector to Canada's GDP in 2018 reached \$72 billion, or roughly 3.5% of total GDP. Mining provides employment for more than 626,000 Canadians, with 16,500 of those jobs held by indigenous people.

BMO has maintained a long-standing global leadership position in metals and mining, earning recognition as the best metals and mining investment bank by Global Finance Magazine for the last 12 years, including this past year.

Of equal importance, we are very proud of our efforts to contribute to Canada's increasing prominence worldwide in environmental, social and governance, or ESG, considerations. BMO was named the top North American bank in the Corporate Knights 2021 global 100 most sustainable corporations in the world, to mention just one example. BMO is also increasingly prominent in sustainable finance, including as joint lead manager on a five-year, \$8-billion sustainable development bond issued by the World Bank. Just this past Wednesday, BMO announced its commitment to help and guide our clients drive economic transformation towards a net zero world.

I mention these items because ESG responsibility has emerged as one of the keys to the future success of the metals and mining sector, as we in Canada stand on the brink of once-in-a-generation opportunities. These are opportunities to create a new era of investment in mining and in emerging industrial and manufacturing sectors, to secure critical materials sources and bolster supply chains, and to boost Canadian competitiveness while taking a leading role in the transformation to clean technologies such as electric vehicle batteries, which are crucial to the net-zero economy.

Canada has the expertise in all facets of mining to tackle this defining challenge of the 21st century. We now have renewed commitment to this goal from the federal government, both in its revised joint agreement with the United States last month and in the Prime Minister's mandate letters to Minister of Natural Resources Seamus O'Regan and other ministers.

To move ahead, we believe we need to focus above all on two areas. First, government at all levels in Canada must commit to working together to streamline the regulatory process in the mining sector. In our view, a transparent, predictable and streamlined regulatory system that enhances collaboration among all levels of government is vital. When it comes to both the environment and foreign investment, BMO favours regulation that carefully balances business and economic realities with public concerns on conservation, public safety, national security and related issues.

Second, the government could look at the entire range of tax, regulatory and financial support programs to determine the most effective means of incentivizing investment in metals and mining in Canada. Would the government, for example, want to establish new federal funding to assist companies that are focused on the discovery and development of metals and minerals crucial to green technology advances or would it consider upgrading the mineral exploration tax credit and flow-through share incentives with the aim of making Canada a world leader in the development of critical battery minerals?

At BMO, we of course support the goal of harnessing our competitive edge in mining to accelerate the pro-growth strategy that former innovation minister Navdeep Bains called "mines to mobility". Accordingly, we should recognize that our mining sector's ESG initiatives, which are widely recognized as the world standard, are increasingly attracting countries around the world seeking ethically produced critical minerals to enable their clean technologies. This, combined with the desire in many countries to obtain secure access to mineral supplies from jurisdictions with similar political and economic values, gives Canada a clear advantage as an optimal source for critical minerals in a post-COVID recovery. For countries that must secure a source of critical minerals to address climate change, Canada can and should be the answer.

With tax and regulatory regimes that encourage investment, there is no doubt that Canada has the entrepreneurial skills, the raw materials and the commitment to sustainable economic growth that can cement our global leadership in this valuable and urgently important sector.

Thank you for having me. I look forward to your questions.

• (1305)

The Chair: Thank you very much, sir. I appreciate that.

Next up we have Mr. Austin from Cameco Corporation.

Mr. Dale Austin (Head, Government Relations, Cameco Corporation): Thank you very much, Mr. Chair.

Good afternoon. It's my pleasure to appear at committee today on behalf of Cameco Corporation to discuss critical minerals and Canada's role as a responsible source of these valuable commodities as we move to a low-carbon, post-COVID economy.

Headquartered in Saskatoon, Saskatchewan, Cameco is one of the world's largest producers of uranium for nuclear energy and is the world's largest publicly traded uranium company. We are uniquely situated with operations across the nuclear fuel cycle, including in mining, refining, conversion and fuel manufacturing. The majority of our operations are located in Saskatchewan and Ontario, and our total Canadian workforce stands at nearly 2,100 employees and long-term contractors. Cameco is a proud and important part of Canada's nuclear and critical mineral supply chains that deliver reliable, emissions-free electricity in Ontario, New Brunswick and around the world.

Canada's uranium and nuclear fuel sectors can play a significant role in underpinning economic recovery and the transition to net zero emissions by providing highly skilled, well-paying jobs; engaging suppliers in a wide range of skilled trades and expertise, and stimulating innovation in a variety of nuclear disciplines, including small modular reactors.

As we consider the role that critical minerals might play in Canada's economic recovery, it is important to note that Cameco is one of the largest employers of indigenous people in Canada. Beyond employment, roughly 80% of the goods and services used at Cameco's mines and mills in northern Saskatchewan, totalling nearly \$4 billion since 2004, are procured from northern and indigenous businesses. Our success depends on the long-term, positive partnerships and mutual trust that we have built with the first nations and Métis communities where we operate. Further development of a critical minerals sector in Canada must recognize the importance of indigenous partnerships for future success.

A significant number of economic, energy, environmental and national security policies being pursued by the Government of Canada require critical minerals. Without access to these commodities, objectives related to net zero emissions, electrification and electric vehicle and battery manufacturing will be challenging to meet. It is imperative that critical minerals discussions are broadened beyond the rare earth elements that are usually associated with clean technology innovation, development and deployment.

Cameco cannot stress enough that uranium, given the significant role that it plays in fuelling zero-emission electricity around the world and its importance to the energy and national security considerations of many countries, is a critical mineral commodity. We were pleased to see it on the list yesterday by Minister O'Regan.

Current use of nuclear energy worldwide helps the planet avoid roughly 2.5 billion tonnes of emissions annually. We're very proud of our contribution to global greenhouse gas emissions reduction efforts, and our uranium facilitates the generation of clean, carbonfree, baseload electricity that will power the transition to a low-carbon economy.

Cameco is fully supportive of the work that's under way on the Canada-U.S. joint action plan on critical minerals collaboration, under the leadership of Natural Resources Canada. A continental approach to improving critical mineral security, minimizing the effects of state-owned players in the critical minerals space and ensuring the future competitiveness of Canadian and U.S. minerals industries should assist in attracting investment to Canadian exploration and mining projects, and spur job creation and economic growth post-pandemic.

Canada and the Canadian workers who drive our industry would be very well served by being viewed as the go-to supplier for various critical mineral commodities needed by the significant U.S. market. We look forward to working with NRCan and the U.S. administration to advance collaboration in this area. With operations on both sides of the border, Cameco has a deep understanding of the bilateral challenges and opportunities and is willing to share our experiences with officials from both governments if it would be helpful.

Canada's resource wealth has long been a major driver of the country's financial health, socio-economic well-being and job creation efforts. The addition of critical minerals to Canada's resource endowment will only enhance the resource sector's economic contributions and our reputation as responsible resource developers that meet the standards of ESG investors. Canada's economic prosperity is linked to our ability to responsibly and sustainably develop and export our abundant natural resources and the value-added products that use them.

We commend Canada's inclusion of uranium on its list of critical minerals. We ask that the committee recognize the sizable contributions that Canadian uranium makes towards domestic and international goals of cleaner air, energy security and a low-carbon economy.

## **•** (1310)

Significant opportunities are available to ensure supply chain security for critical minerals and to enhance co-operation on initiatives that address climate change in Canada and the United States. We should position ourselves as the critical mineral supplier of choice for our largest trading partner and put in place policies and regulations that enable resource companies to benefit from that relationship.

Thank you for your time.

(1315)

The Chair: Thank you, Mr. Austin. I appreciate that.

Next we have Mr. Brosseau.

[Translation]

Mr. Christian G. Brosseau (Vice-President, Investment, Strategic Capital, Energy and Environment, Fonds de solidar-ité des travailleurs du Québec): Hello.

Mr. Chair, members of the committee, thank you for inviting me to speak to you today.

The Fonds de solidarité FTQ was created in response to the economic crisis of the early 1980s. Today, it is the biggest workers' fund in Canada, with net assets of \$15.6 billion. More than 700,000 Quebeckers are Fonds shareholders, which is equivalent to one in six workers. For every dollar in federal tax credits granted to our shareholders, we invest \$8.85 to support economic development and jobs.

The Fonds' investments primarily go to support companies that generate economic spinoffs both in Quebec and elsewhere in Canada. The Fonds is active in every sector of the economy, including mining and transportation electrification. Our investment portfolio also includes many companies in the value chains associated with the mining sector, as well as the activity sector seeking to decarbonize our economy. The Fonds has been investing in the mining sector for more than 25 years, irrespective of economic cycles. We are recognized for our expertise and our network of partners. The Fonds is investing in the mining sector, from exploration to processing, and in public and private companies linked to this sector.

With regard to critical minerals, we believe that governments have a major role to play. Governments are able to take on a higher risk than the Fonds can bear on its own. The development and processing of these minerals may require the involvement of strategic partners. Without targeted support from both the federal and provincial governments, it could be very hard to attract partners that have the technical expertise to develop these strategic projects.

Transportation electrification marks a vital turning point in balancing supply and demand for these metals. On top of that, there are also issues related to energy production and management. For instance, the auto industry is concerned about long-term access to the inputs needed to manufacture the batteries required for fleet electrification, and it is also concerned about the availability of charging infrastructure.

As a corporate citizen, the Fonds has the will and the duty to contribute to efforts to decarbonize transportation and the economy, in addition to taking an active part in the just energy transition through responsible investment strategies and social engagement.

The Fonds' strategy is to invest, and to support its partners, in the promotion of clean technologies or technologies that foster the adoption of processes capable of reducing greenhouse gas emissions. Processing our resources locally is one way to start achieving that objective. Creating an integrated value chain that goes from development to processing, as well as promoting environmentally friendly product design, recycling and the development of the circular economy, are essential for decarbonizing our economy while supporting the economic and social development of Quebec and Canada.

The Fonds has a significant impact on the economy as a whole. Year after year, in good times and bad, the Fonds accounts for a substantial proportion of the risk capital and development capital investments made in Quebec. The Fonds also bases its contributions on objectives that have real social impact by combining returns with inclusive long-term growth. In an economy where investors too often focus purely on financial returns, the Fonds has opted instead to develop responsible investment practices. The decision to invest in a company is based on an analysis of how that investment would impact its employees, the company itself and the communities where it operates.

In its ongoing quest for positive impact, the Fonds is now hoping to contribute to the most pressing priorities of the modern age by helping companies weather the monumental human, technology and energy transitions that define our era.

In conclusion, what we hope you will take away from our testimony today is that the Fonds is, above all, a major player, a responsible investor and an influential investor. The Fonds represents a vast network of partners and speaks for SMEs. The Fonds is also actively involved in the energy transition, the decarbonization of the economy, and the circular economy. In other words, the Fonds is a partner of choice. It is at the forefront of the circular economy and the decarbonization of the economy.

Thank you for your attention.

(1320)

[English]

The Chair: Thank you, sir.

Next we have Mr. Fung from Torngat Metals.

Mr. Robert Fung (Chairman, Torngat Metals Ltd.): Chair, committee members, panellists, good afternoon.

Let me begin by emphasizing that there's an opportunity for Canadian leadership in this vital strategic sector that we cannot afford to miss. I will focus on three topics: first, the opportunity to build a critical new industry in Canada; second, I will use the Torngat rare earth project in northern Quebec, which I chair, as an example of Canada's opportunity to be a global leader of an industry vital to the low-carbon economy; and third, the important actions that the government can take to realize this opportunity for Canada.

Rare earths are critical to enable the world to transition to a low-carbon economy. They are a group of 17 elements which are critical raw materials because of their technologically advanced and strategic end uses. They are used in lasers, medical scanners, emission-reducing catalysts, fibre optic telecommunications, ceramic capacitors—literally any technologically advanced piece of equipment. However, the most important use to get to a low-carbon economy is to manufacture permanent magnets for electric motors, wind turbine generators and even for the speakers in our smart phones. They are needed everywhere.

Electric vehicles use permanent magnet motors because of their higher efficiency and smaller size and weight. When Canadian auto manufacturers, in fact, all global manufacturers, commit to electrifying their vehicle platforms, they are creating an enormous demand for specific rare earth elements. Canada has the opportunity to develop our own secure supply of rare earths to support Canada's, the United States', and the world's demand for electric vehicles and to do so in an environmentally sustainable fashion.

Today, China supplies in excess of 80% of world demand. We all know that is not a geopolitically acceptable situation.

Torngat Metals is a Canadian-owned company, developing one of the world's largest rare earth ore bodies with the best mix of the particular rare earths needed to make permanent magnets. Torngat's deposits are located in northern Quebec, about 240 kilometres northeast of Schefferville. It is Torngat's strategy to prioritize environmental sustainability throughout all of its operations and emphasize consultation and collaboration with indigenous governments and communities on all aspects of the project.

The rock containing rare earths will be mined in a totally environmentally sustainable manner using wind power as much as possible and using the Lockheed Martin hybrid airships to transport the rare earth concentrate to Schefferville, then by rail to Sept-Îles and to the processing plant in the Bécancour industrial park between Montreal and Quebec City.

Producing the separated rare earth oxides is where the value is created, and Torngat is collaborating with world-leading technology partners to assemble the expertise needed to produce these specialty chemicals and to grow this expertise and related R and D in Canada. Torngat targets to produce cost-competitive separated rare earths in Quebec in 2025-26.

Rare earth projects such as Torngat's need support to get into production to meet Canada's needs and the industrialized world's needs, so let me offer four recommendations for Canada:

First, set a near-term deadline for NRCan and ISED to complete and publish their critical metals and rare earths strategy. Second, increase federal government efforts to collaborate with Europe, the U.S. and Japan on building new supply chains outside of China. Third, expand the criteria with existing NRCan and ISED programs to enable rare earth projects to qualify and apply for funding. Fourth, provide funding assistance for development projects to bridge the gap between early-stage development and construction financing.

These initiatives would make an enormous impact for these projects to get into production more quickly.

When I read a report of the Government of Australia's commitment to hardwire themselves into the global supply chain using access to their \$1.3-billion modern manufacturing fund, and we, in Canada, have the natural resource, are an education nation with highly skilled labour and sit next to the world's largest economic and industrialized country, I can only implore Canada to step up. We cannot afford to miss this opportunity for our country and for our allies.

• (1325)

Thank you, sir.

The Chair: Thank you, Mr. Fung.

Last but not least is Vale. I don't know who is going to be speaking first, whether it's Ms. Concepcion or Mr. Merlini.

Mr. Juan Merlini (Head, Sales and Marketing, Vale Canada Limited): Mr. Chair, thanks. I will start, and then I'll pass to Nancy.

Members of the committee, good afternoon. It's a pleasure to appear before you today and have the opportunity to address the important topic of how Canada can position itself as a key supplier and enabler of critical minerals with the global low-carbon transformation that is under way.

My name is Juan Merlini. I oversee the sales and marketing function for Vale's base metals globally. I am joined by my colleague Nancy Concepcion, who leads our marketing and research teams for the base metals business line.

Before we begin, we would like to acknowledge that we are presenting to you today from the traditional lands of the Anishinabe, Haudenosaunee, Huron-Wendat and Mississaugas of the Credit territories. Vale would also like to acknowledge the indigenous peoples whose lands we operate on in Manitoba, Ontario and Newfoundland and Labrador. Vale is one of the world's largest integrated mining companies with global headquarters in Rio de Janeiro, Brazil, and a market cap of approximately \$90 billion.

Our global base metals business has a rich 119-year history. It is headquartered in Toronto and has operations across five continents. We are present in Newfoundland and Labrador, Ontario and Manitoba. As one of the largest producers of high-quality nickel and an important producer of copper and responsibly sourced cobalt, we produce the metals that are critical to building a cleaner and greener future.

Our operations in Canada provide employment to over 12,500 Canadians. Our direct and indirect GDP contributions to the Canadian economy over the past decade have totalled \$43.7 billion Canadian, which includes \$12.7 billion in capital investments.

Vale Canada produces 97,000 tonnes of nickel, representing 51% of the country's nickel output. Vale Canada produces over 125,000 tonnes of copper, representing 23% of the country's copper output. Regarding other key minerals for the low-carbon economy, Vale Canada also produces over 2,000 tonnes of cobalt as well as platinum and palladium.

Vale shares the government's determination to decarbonize the Canadian economy and create a greener and healthier future for Canadians. We have set ambitious decarbonization goals for all Vale's businesses across the world. By 2030, our plan is to achieve a 33% reduction in GHG emissions, and by 2050, carbon neutrality. Our company has announced \$2 billion to meet these ambitious goals, and we are already under way in defining projects to get us to this target.

These efforts have involved, and will involve, far-reaching changes. I'd like to highlight that Vale in Ontario has already spent \$1.5 billion to clean the air we breathe. Our clean AER, atmospheric emissions reduction, project, was the single largest environmental investment in the history of Greater Sudbury and resulted in an 85% reduction in sulphur dioxide, a 40% reduction in metals particulate and a 40% reduction in greenhouse gas from our Copper Cliff smelter complex. Looking at the present and to the future, we are focusing our efforts on electrifying our fleet, switching our fuels from diesel to biofuels and exploring the feasibility of storing carbon in tailings.

Our GHG agenda is only one part of Vale base metals' broader effort to advance the environmental, social and governance performance of our company and our industry. Given the issues around critical minerals in other parts of the world, we believe the Canadian mining sector has a special responsibility to set the standard in building positive relationships with local communities and delivering benefits to indigenous partners and other stakeholders where we do business.

As we look to the future, we believe that Vale is well positioned to contribute to the development of the electric vehicle industry. Here in Canada, we produce three key base metals: nickel, cobalt and copper. All of them are important components of the EV supply chain, but meeting Canada's aspirations to be a player in this market will involve addressing some important issues.

Meeting the rising demand will be a challenge, particularly for copper and nickel.

We also need to develop strategic long-term relationships in key spaces, such as EVs, and this includes partnerships with leading academics, institutions, customers and OEM producers that support long-term and significant investment. These innovation and supply chain ecosystems are essential.

Coordination among government levels will also be very important, as the supply chain will need federal, provincial and local coordination to ensure that we can respond to this generational opportunity as efficiently and cohesively as possible.

### **(1330)**

Bringing new nickel, copper or cobalt deposits online is capital intensive and takes a considerable amount of time. Even in the most stable and favourable mining investment jurisdictions like Canada, it still takes at least seven to 10 years from the discovery of a viable deposit until you have commercial production

All of these highlight the need to have the greatest amount of policy certainty, permitting support, coordination and commitment from government, which are essential for success. Lack of attention with regard to the upstream and the necessary investment in the upstream aspects of the supply chain and related processing development will constrain the development of the EV supply chain in Canada.

We see industry, downstream manufacturers and all levels of government as partners, and in order for a North American supply chain to be developed and remain robust, we will all need to work together to make this happen.

I'll pass it over to my colleague Nancy to highlight the landscape for EVs.

The Chair: I may have to stop you there because the time limit is five minutes per witness group. If you have something very brief to add, go ahead, but we're going to have to move into questions quickly.

# Ms. Nancy Concepcion (Executive Manager, Global Product Marketing Manager, Vale Canada Limited): Thank you, Chair.

We have three key points that we can cover. One is that the EV industry has clearly passed a point of no return for the auto industy.

Over \$300 billion has been invested into the development of EV models, and battery producers have contributed roughly \$130 billion of investment, so now is the time to see some significant investment in developing the resources to expand raw material supply.

The second point is that supply chains are already being localized. We've seen battery hubs growing across Europe, the U.K., Canada and the U.S.

The third abbreviated point is really that Canada is well positioned, and I think Juan covered many of the points, as have other committee members.

Thank you for that, and I'll turn it back to Juan for closing.

**Mr. Juan Merlini:** On behalf of Vale and our base metal head-quarters here in Canada, we thank you again for the opportunity to appear before you today. We will look forward to any questions you may have.

Thank you.

The Chair: Thank you.

Thanks to all of our witnesses. I think that's the first time I haven't had to interrupt somebody to get them to wrap up, so I'm grateful for that.

We'll move on to our first round of questions for six minutes each, starting with Mr. McLean.

**Mr. Greg McLean (Calgary Centre, CPC):** Thank you, Mr. Chair, and allow me to be the first to thank all of our witnesses here today who have provided a five-minute glimpse of their operations and of how we're going to move forward in this industry. It's very interesting.

My first question is for BMO.

Mr. Bahar, one thing we've heard in this committee before, which I'd like you to elaborate on, please, is how much of this industry is controlled by foreign actors around the world, foreign actors in particular who may not have Canada's interests at heart, and how Canada is lagging behind right now. We're looking at China. Benchmark has told us that China controls about 75% of critical elements. As a result, they can flood the market at times and limit the prices so that a lot of other smaller or developing mines very quickly become uneconomical.

Can you comment on that, please?

Mr. Ilan Bahar: Sure. I'm happy to. Thanks for the question.

It's great to hear that you've had folks like Benchmark come to speak with you, because they are experts in the field of supply and demand, and I think they would have great insights for the committee.

Admittedly, from where I sit, I don't spend a lot of time thinking about supply and demand in detail. Really what I think about is the capital markets, what investors are looking for, what investors think about, and also what companies are thinking about strategically from an M and A perspective.

I think the way I would come at it is that if parliamentarians, citizens, companies, or anybody has concerns about any particular jurisdiction with respect to its governance, its rule of law or its political system, it would make sense to have a public policy that supports greater extraction and production of clean energy minerals from a trusted jurisdiction like Canada. As I mentioned in some of my comments, I think the way we think about it is that there could, perhaps, be levers that could be pulled, whether they be tax, regulatory, funding, or otherwise that could incent domestic activity.

• (1335)

**Mr. Greg McLean:** Mr. Bahar, I'm sorry, but I have only limited time here.

Mr. Ilan Bahar: Sure. That's no problem.Mr. Greg McLean: Thank you for that.

You talked about the regulatory tax tools we can use in this. How many of those, in your experience in the mergers and acquisitions space represent early funding from Canadian flow-through shares, for instance, Canadian exploration expenses, that then get taken out upon the M and A by a foreign actor? Effectively we're subsidizing, from a tax perspective, early development only to lose that development at later stages to an international player.

**Mr. Ilan Bahar:** In my experience, I think it is quite limited that it occurs that way. I think the flow-through truly drives exploration activity across a number of commodities. I think we've seen great benefits throughout the sector and the capital markets through flow-through.

I think a very limited amount of those flow-through dollars ultimately end up benefiting foreign entities. That would be my gut feeling response to the question.

Mr. Greg McLean: Thank you.

I'll move now to Mr. Brosseau.

Mr. Brosseau, can you please explain your organization's investment in Nemaska? At early stages, obviously, there were all the hopes of turning Nemaska into exactly what we hoped to accomplish, that is, having a value chain of lithium, and then processing lithium into higher value-added products as part of our battery supply chain. That of course has failed immaculately, and the Government of Quebec, through some of its entities, is going to invest another \$600 million, as I understand it, into the re-formation of Nemaska

Could you give us some background on that, please?

[Translation]

**Mr. Christian G. Brosseau:** I just want to mention that the Fonds de solidarité FTQ did invest in the Nemaska Lithium deposit, but as a minority shareholder.

Getting involved in the development and extraction of rare earth elements and critical minerals was part of our strategy of investing in the critical minerals value chain, as I said earlier.

As for the future of that entity, the Fonds has a very minor role to play. The Government of Quebec is really the one taking a leading role in the relaunch of the Nemaska mine.

[English]

Mr. Greg McLean: Thank you very much.

How much have you invested in it initially, since 2013?

[Translation]

**Mr. Christian G. Brosseau:** Unfortunately, I don't have that information on hand.

[English]

Mr. Greg McLean: Okay. Thank you.

I'll move now to Mr. Fung.

I really appreciate all that you're giving us here as far as our recommendations are concerned. As well, as for the developments that you're looking at in Nunavik, can you tell us how long it takes for mine development in Canada? How have those regulatory hurdles that hold back development in a jurisdiction like Canada changed and how could they be ameliorated so that we can get closer to developing these resources in real time?

**Mr. Robert Fung:** Our ore body is in northern Quebec. We are pretty well on the Quebec-Labrador border.

The real issue for companies like ours is not so much the regulatory, because we can deal with the regulatory. The big issue, especially in the rare earth specific area, and because you have such a big, dominant player like China, it is extraordinarily difficult to finance from the time you get the deposit, drill the deposit and move into production. This is the time when essentially you're most vulnerable. This is where, in terms of my recommendation, we're talking of government stepping in to help to get you, between the time of defining the resource, to a point where you can get the normal financial instruments to work.

**(1340)** 

Mr. Greg McLean: Thank you.

The Chair: Thanks, Mr. McLean.

Mr. Lefebvre, we'll move over to you for six minutes.

Mr. Paul Lefebvre (Sudbury, Lib.): Thank you, Mr. Chair.

[Translation]

Thank you to the witnesses for joining us today.

[English]

I'm coming to you from Sudbury. Before I get to my folks at Vale, who are in my backyard, just down the street here from me, I'd like to talk to Mr. Bahar from BMO very quickly.

In your presentation you talk a lot about supplier of choice. When you talk about that you're talking about the exploration side and the extraction side, that Canada can become that by our choice in that sense.

One thing that we're trying to explore in this committee is how we can make sure that the whole value-added chain is kept in Canada. That's always a tough part, because in Canada we usually dig our minerals. We explore, extract, and process, sometimes, and then they usually leave the country. They are input somewhere else, manufactured, and then we'll buy that back from here.

From an investment point of view, what is BMO concerned about?

Do you have some quick thoughts on how we can achieve that in Canada to make sure that the value-added chain is done inside Canada?

Mr. Ilan Bahar: It's a great question. I wish I were better placed to actually answer it. I'm so focused on just metals and mining—my clients are metal and mining companies—that I really focus on the first part of the value chain. I recognize your limited time and I don't want to take your time to respond to that, because it's a very broad question.

**Mr. Paul Lefebvre:** It is a broad question, but it's an important one, right?

Mr. Bahar IIan: It is.

**Mr. Paul Lefebvre:** We can extract more, which is great, but it's going to leave the country. We've added a few jobs here on the extraction side and the exploration side, but then it's gone. That's what we're trying to say. That's why I'd like to talk to my folks at Vale.

I know that we process it here in Sudbury. What is your plan? Would you guys like to share your ideas as to how we can do this and how Vale is exploring the possibilities of creating more of a value-added chain in Canada? Obviously, I'd like it to be in Sudbury, in my backyard, but I'm very nationalistic in my approach. It could be anywhere in Canada.

How do we ensure that? What are you guys working towards to achieve that?

Mr. Juan Merlini: Mr. Lefebvre, thanks for the question.

I think there is a big opportunity for the North American EV industry to foster that supply chain in the country, considering all the changes going on in the world and the strategic need to make sure of the availability of the resources in all the materials required for EVs. There definitely is a big supply chain in China that has been built and will continue growing to supply the rest of the industry, but we are seeing this coming more and more in North America and in Europe as well.

What are we doing? We are in discussions with all the players in this industry to ensure there are opportunities to be explored here in the country, not only in Canada but in North America as a whole, because most of the auto producers are here. We are in negotiations. Currently, our product will require some processing, depending on the use, but I think there is a big opportunity, with the right coordination and the right support, to foster that.

The challenge, just to finish the point, is that the demand is much higher than what is available. In order to foster that additional supply of materials, we will need a lot of support and coordination in order to make that happen. Otherwise, the auto industry will find other sources to supply their needs.

**Mr. Paul Lefebvre:** That's a really good comment. One of the things we're all concerned with is whether that has already passed us, in the sense of whether different countries are already looking at looking at other inputs because of the supply and the time it takes to find a deposit, extract the deposit and process that mineral or metal. Is this something that is a risk as we move forward?

What are your thoughts on that, Mr. Merlini?

**Mr. Juan Merlini:** Yes, Mr. Lefebvre, it is a risk. We are seeing the automotive industry already elevating the tone particularly for some materials like nickel. There is a concern that there won't be enough nickel for their needs. This could lead to two movements if we don't react fast enough to supply that. They will find another substitute, other materials, to supply the need, or they will foster production in other regions that will be able to supply that need. The risk is real.

• (1345)

**Mr. Paul Lefebvre:** That's what happened in 2007-08 when the price of nickel skyrocketed and we had the Indonesian nickel, what we called pig nickel. They flooded the market with that to drive the price down, but the quality is completely different.

I appreciate that.

Mr. Chair, how much time do I have left?

The Chair: You have about 40 seconds.

Mr. Paul Lefebvre: Okay.

To continue on that, Ms. Concepcion, you talked about how Canada is well positioned to play a role there, certainly on the EV side. Can you elaborate as to how Vale is thinking in the next five to 10 years in its strategic thinking with respect to their role in the EV space?

**Ms. Nancy Concepcion:** Thank you for the question. Yes, I can elaborate on that.

It's really around a short-term plan that's looking at leveraging our existing assets within Canada to satisfy the demands of the players, particularly the automakers, who are coming to us and asking for supply. Then, I think, there's a longer-term plan that says we do have some assets in Canada that would be fantastic to develop and haven't been economic to date, and that could in the long term satisfy a lot more of the demand, especially from a local and regional perspective.

We're working on both of those fronts, both in the short term to try to make immediate change, and then in the long term to look at how we move forward and how we make the financials look better for a deposit that maybe hasn't been economically viable in the past.

Mr. Paul Lefebvre: Thank you.

The Chair: Thank you, Mr. Lefebvre.

Mr. Simard, it's over to you, sir.

[Translation]

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

Like any self-respecting Quebecker, I know all about the Fonds de solidarité FTQ, having personally invested money there for my RRSP.

Mr. Brosseau, you mentioned earlier that the government may have a role to play with regard to the risks associated with the new technologies that will emerge as a result of critical mineral development, especially in the field of transportation electrification.

The Québec Plan for the Development of Critical and Strategic Minerals 2020-2025 provides for an investment of \$90 million over that five-year period. Thanks to its hydroelectric resources and its proximity to major markets like the U.S. and Europe, Quebec is extremely well placed to monitor the development of transportation electrification.

You talked about the role of governments earlier. How do you see the federal government's role in this transportation electrification strategy?

**Mr. Christian G. Brosseau:** As I said earlier, developing the entire chain, from exploration to electrification, takes and will take a huge amount of capital. Governments at both the provincial and federal levels are involved in these projects. However, the amount of capital required is so massive that companies and investment funds like ours, the Fonds de solidarité FTQ, can't take on the associated risks. It's beyond our financial capacity.

Governments should know that they can intervene and support this sector in order to foster its development, as the Government of Quebec has done.

We're living in a time of major technological upheaval, a new industrial age where new technologies require huge amounts of capital and expenditure. In order for us to reach a point where the cost is fully amortized and benefits the entire economy, governments will first need to make targeted investments in exploration and, above all, in processing.

There will also need to be programs that promote recycling more strongly. For example, governments need to support new technologies for recycling batteries. It's all well and good to talk about exploration and development and how it's part of Canada's DNA. I get it. However, if we want to play a role in the overall value chain, we will have to get involved in every sector in that chain, not just the ones early in the process. That means getting involved not just in processing and development, but also in recycling and the circular economy associated with these metals.

Metals are by definition a natural resource that is unfortunately limited. That's why it's important to take the entire chain into account, and governments have a role to play. They can support us by introducing regulations or programs that would reduce the risks and capital costs associated with the massive investments we need.

**(1350)** 

**Mr. Mario Simard:** We know that this situation will probably open up business opportunities. The federal government will have a recovery plan. Now is the time to refocus the economy.

Electrifying transportation reduces carbon emissions. If we want a low-carbon economy, electrifying transportation is a good way to get there.

The federal government once mooted the idea of an artificial intelligence supercluster. In light of the recovery plan, isn't it time to consider creating that supercluster, which could focus on transportation electrification, among other things? That could be a great opportunity.

You didn't mention this, but you must be involved in certain projects, like the Lion Electric project in Quebec, which seems promising.

Could you tell us about other projects that the Fonds de solidarité FTQ is involved in, in the area of transportation electrification specifically?

**Mr. Christian G. Brosseau:** As you'll see in our brief, our organization is indirectly involved with companies such as Lion Electric through other investment funds. It's really part of our investment strategy.

We're addressing these issues through more than transportation electrification though. Our approach is big picture. We are trying to advance a strategy to decarbonize transportation altogether. We know that electrification is good for cars for the general population, but it is not as efficient for heavy transportation, so we need to spend more time looking at ways to decarbonize heavy transportation.

We need to do that for industrial processes too. That's a big factor because they're major greenhouse gas consumers and emitters. We're also talking about mineral exploration a lot these days. We're studying various kinds of technology and developing partnerships to find ways to electrify or decarbonize mineral exploration and development. That is part of our overall strategy to decarbonize the economy. Electrification is not the only way.

Mr. Mario Simard: Do I have any time left, Mr. Chair?

[English]

The Chair: No, in fact, you're right on time.

Mr. Cannings, it's over to you, sir.

Mr. Richard Cannings (South Okanagan—West Kootenay, NDP): Thank you, Mr. Chair.

I'd like to thank the witnesses for being here. It's been a very interesting discussion so far.

I'll start with Ms. Concepcion.

It seems that a couple of times you've been left at the end of a question period and haven't had time to really say what you want to say.

I'm going to pick up on the EV topic. You said we had crossed the point of no return. I saw a recent poll where it showed that 70% of Canadians were seriously considering buying an electric vehicle as their next car, and that Canada was well positioned to take advantage of that.

Earlier in this study, we heard from Eagle Graphite, which has a mine in my riding. James Deith talked about how difficult it was when you don't have that value chain within Canada to buy and sell your products, and had to sell it elsewhere, and that China controlled a key part of that chain.

Could you expand on that? How can Canada, and perhaps more specifically the government, stimulate this? How can we develop that value chain, whether it's graphite, nickel, cobalt or any of the rare earth elements we've heard about?

**Ms. Nancy Concepcion:** There are several paths that can be taken in order to develop. It's important to understand that this supply chain will develop naturally, following the automakers. As automakers transfer into production of EVs, the supply chain will build around them. It's just more convenient. It lowers emissions, It lowers carbon footprints.

There are components there saying that most of China controls the processing of our metals in our materials. I mean that across the battery of metals portfolio. Many countries mine them, but they go to China for processing.

We will definitely have to expand. Not only do we need to promote the auto industries into making EVs, which means promoting them with consumers, but we also have to support the development of that supply chain. The processing of the minerals, the development of the battery cells, the battery materials, all need to be brought together and incentivized.

What's really happening is the creation of these battery hubs. We're seeing them formed across the world, particularly in Europe, which is new, but they're also starting to form in North America.

• (1355)

Mr. Richard Cannings: Thank you.

I want to jump from there to Mr. Fung.

You talked about the Australian commitment to develop these value chains and these critical mineral activities. Could you expand on what Australia is doing and what Canada should be doing along those lines?

**Mr. Robert Fung:** What I find interesting so far is that in Canada we've been talking about batteries. Everybody has forgotten that a car needs something to power it, which are the permanent magnets to build those electric motors.

What is happening in Australia is in reaction to what the United States has been trying to do. The U.S. is trying to get itself in a position to be a major supply chain for all of these products in the United States. The two countries that supply these particular rare earth elements are Australia and Canada. Australia jumped on the former American president's request to build a supply chain. Australia moved very quickly.

What Australia has done, in fact, is formed a specialty office in the Australian government to deal with these critical metals. Any small Australian company can go to this particular government office and it will assist them to get funding. That's the first piece of it. The second piece of it is essentially what I was suggesting we do in Canada. They have essentially said they will make their \$1.3-billion modern manufacturing front available for this particular sector to access.

The Australians have been moving very quickly to get their supply chain in place, as a competitor to Canada. In fact, the Australian government says it intends to hardwire itself to what in essence is the new supply chain to develop these rare earth elements.

The Canadian government and this committee should remember that, even though we've been talking about batteries, a vehicle needs two things for it to operate. You need a motor and a battery. We've been focusing on batteries.

Interestingly enough, Canada has a very unique position in the permanent magnet sector. We have a material that the U.S. does not have, these particular rare earth elements which are needed for the permanent magnets in electric motors. That is one thing I would like to remind you of in Ottawa. We have something the United States does not have, and it is critical to the industrialized world. We have to develop it.

Mr. Richard Cannings: Thank you.

If I have time-

The Chair: That's your time, Mr. Cannings. My apologies.

Mr. Richard Cannings: Okay, it might have to wait. Thanks.

The Chair: We will get back to you.

We're in the five-minute round now and we're starting with Mr. Patzer.

Mr. Jeremy Patzer (Cypress Hills—Grasslands, CPC): Thank you very much.

Thank you, everybody, for being here today.

Mr. Fung, I'm going to jump back to you and ask you some questions.

You're talking about the critical minerals we have here in Canada that the U.S. doesn't have. Am I correct in understanding that we are currently not actively producing those materials?

Mr. Robert Fung: There are only two production operations outside of China. One is in Australia. The ore in Australia is sent to Malaysia to process, and that ore goes back to Australia and then to China for use. The second operating mine outside of China is in the United States. The interesting part about that particular mine is that it does not have the rare earth elements that are needed for making the permanent magnets in electric motors. It has one or two of the numbers that are needed. We in Canada have them all. That is the unique opportunity for us here. We're in the process of trying to finance this operation and bring it into production.

#### • (1400)

Mr. Jeremy Patzer: Let's say that you started the process today. How long would it take, starting today, to get to the point where you would have a mine or facility that is actually producing that material?

**Mr. Robert Fung:** Sir, if we started today, we could be in production providing rare earth oxides to markets in 2025.

**Mr. Jeremy Patzer:** We're looking at about four to five years from start to finish.

**Mr. Robert Fung:** That's absolutely correct, but it's not only the money. We're talking about the mine, process and facility, which is really where skilled labour comes into play.

The mining part of it is the easy piece. The piece where the benefit is added to Canada is in the processing and selling of the individual rare earth elements. In Bécancour, Quebec, is where the real value is added to get the supply chain.

I believe that if the industrialized world really recognized that Canada is serious in doing this, you would see those who need these particular rare earth elements setting up operations and supply chains to make permanent magnets very close to the supply source.

**Mr. Jeremy Patzer:** Are there any issues or concerns about having companies that are under state control, interference from China, from the CCP, in trying to set up shop in Canada to secure those critical minerals at the peril and risk of Canada's interests?

**Mr. Robert Fung:** Today China controls something in excess of 75% to 80% of that market. Essentially, they have the mines and they have the processing. Not only do they have the processing, but they were smart enough. They have what, in essence, is the manufacturing to produce pretty close to the entire supply chain down to the permanent magnets.

We have the ability to do exactly that. We can do it here. We have all of the materials needed. We know how to mine. We know

how to get it into the process facility. We know how to do it. In fact, Torngat is probably the most advanced of the developing companies to produce this material right across the spectrum of the world outside of China.

**Mr. Jeremy Patzer:** Mr. Austin, it's great to have another person from Saskatchewan joining the committee. Thank you very much for being here.

Cameco is a great success story for Saskatchewan. Unfortunately, there have been a couple of closures over the last number of years. I'm just curious. To get those mines reopened, what's the outlook for that, and what would it take to get those mines functioning again down the road?

Mr. Dale Austin: The first instance, our Cigar Lake Mine, will come back on as soon as the pandemic conditions allow it. It was taken down last year and also this year in response to trying to keep the pandemic out of northern Saskatchewan. We didn't want to inadvertently become a site for community spread. As soon as the pandemic conditions relent, we'll be in a position to think about opening Cigar Lake. There are no immediate decisions on that, but that is the one that will come online first.

With respect to McArthur River, that was taken offline in 2018 as a result of low uranium prices. In order for that to come back online, frankly, we're going to have to see a rebound in those prices and have that uranium delivered into long-term contracts. We see light at the end of the tunnel. It's been a bit of a trough, a long trough, for uranium prices, but we see some improvement in the future.

# (1405)

The Chair: Thank you, Mr. Austin.

Thank you, Mr. Patzer.

Mr. Jeremy Patzer: Thank you.

The Chair: Mr. Sidhu, it's over to you for five minutes.

Mr. Maninder Sidhu (Brampton East, Lib.): Thank you, Mr. Chair.

Thank you to all our witnesses for being with us today.

My first question is for Mr. Bahar.

You mentioned that BMO has won awards and is recognized as one of the most sustainable corporations in the world. Can you walk this committee through BMO's sustainable investment portfolio, possibly pointing to similar investments in critical mineral projects around the world, and inform us of what the results of those investments are?

Mr. Ilan Bahar: Thank you for the question.

Just this Wednesday, BMO announced a net zero policy. As part of that, BMO also has a fund focused on sustainable finance. We also have a portion of BMO asset management overall in BMO GAM that has an ESG-focused investment arm. I admittedly don't have in front of me the particular investments that each of those have made, but there's certainly a focus in various parts of BMO to make investments focused on sustainability.

The fund itself is a fund that the capital market is close to. It is in the early days of being developed and is developing its strategy going forward.

Mr. Maninder Sidhu: Thank you for that.

Mr. Fung, you mentioned the importance of processing the material here in Canada. I really appreciate your insights into what Australia, the U.S. and other countries are doing. What is the hesitancy by the industry in adding processing capacity here in Canada? I know it's nothing new, but can you provide some insights into that?

Mr. Robert Fung: I assume that you are focusing strictly on what I'm talking about with respect to the rare earths. Essentially, the big issue of course is that when you have a country as dominant as China controlling that industry—they've done it before—they see a competitor getting involved, so they collapse the prices.

It's one of the interesting things about—let me call it—the particular rare earth situation. What I understand from the different studies that have been done by NRCan is that once we are able to produce the rare earth oxides and the individual rare earth elements that we're talking about in Bécancour, the process of going from that to, in essence, the particular alloys to make permanent magnets is very similar to the aluminum sector. It requires a lot of energy, and that energy is abundant from Quebec hydro. It's a process that is very similar.

What we have to do in Canada is to really say to the world that we intend to do this. If the Government of Canada would say that we intend to put a facility that is going to manufacture or produce these particular rare earth oxides by a set date, industry will recognize that. Industry today recognizes that they're stuck with a 75% to 80% production out of China. Industry is looking for another source. We have the ability to do it. We have a very unique ability here in Canada to do something. This is a once-in-a-lifetime shot at being in a position to have a degree of control in a very large market.

Mr. Maninder Sidhu: Thank you for that, Mr. Fung.

Mr. Chair, can I share my remaining time with Mr. McDonald, please?

The Chair: Absolutely.

There's just over a minute left.

Mr. Ken McDonald (Avalon, Lib.): Thank you, Mr. Sidhu, for that kind gesture.

I have just a quick comment, I guess, and a question for Mr. Merlini from Vale.

You operate a facility in Labrador, a mining operation, and a processing facility in Long Harbour, which is actually in my riding. I visited the facility and was quite amazed by what goes on there.

Could you comment on the future that you see for that facility and the impact that it has made on a very rural area of my riding and the surrounding communities?

Mr. Juan Merlini: Sure. Thanks for the question.

In terms of the mining activities, we are now investing in an underground mine in Voisey's Bay. This was an investment of approx-

imately \$1.6 billion. It's coming online this year. This is a very important investment in order to keep producing material to feed our plant in Long Harbour. This plant, which is a hydrometallurgical plant, is very important because it produces very green nickel and cobalt. It will continue to be fed by this material coming from our underground mines and will produce for a long period the nickel and cobalt that we take there. This is our plan, and we will continue looking for other opportunities from the mining side to feed our plant in Long Harbour.

**•** (1410)

The Chair: Thank you.

Mr. Ken McDonald: Thank you.

The Chair: Thanks, Mr. McDonald.

Up next for two and a half minutes is Mr. Simard.

[Translation]

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

Mr. Fung, I want to make sure you can hear me properly through the interpretation.

[English]

Mr. Robert Fung: I can, yes.

[Translation]

**Mr. Mario Simard:** I listened closely to what you said, and you piqued my curiosity with your remarks about rare earth oxides. If I understand correctly, a process similar to the electrolysis used in aluminum production can produce permanent magnets. Here's my concern: often, when a particular country is the only country that has this kind of rare earth oxide, the material is extracted and sent to other countries for processing.

A while ago, a witness recommended setting up a critical minerals reserve so that the processing part of the supply chain could happen here in Quebec or in Canada.

I'd like you to comment on the specific potential of rare earth oxides and the possibility of producing permanent magnets.

[English]

**Mr. Robert Fung:** I'm very happy you asked that question. That's exactly where I'd like to go.

We can produce the rare earth oxides for sale in Bécancour, Quebec. If we stop there, while in essence other countries or other places have the ability to develop further along what I call the value chain....

I am suggesting that we not only produce and sell the rare earth oxides at Bécancour, Quebec, but we go further downstream where we produce the actual magnets. Then, if possible, we produce the actual electric motors in Quebec to sell to the world.

That's where I am coming from with respect to this. The further downstream we can go, the better off we are. I am not a supporter, frankly, of us producing rare earths and selling them all over the world to other places. I would like to see us developing as much of a downstream operation in Canada as possible.

[Translation]

**Mr. Mario Simard:** Thank you, Mr. Fung. I may not have much time, but I'd like to—

[English]

**The Chair:** Mr. Simard, you only have about 20 seconds for a question and answer.

[Translation]

**Mr. Mario Simard:** Mr. Fung, would it be possible for you to send your documentation to our analysts? I'd like to dig into this issue.

Thank you for your testimony.

[English]

The Chair: Thank you, Mr. Simard.

Mr. Cannings.

Mr. Richard Cannings: Thank you.

I'm going to turn to Mr. Bahar.

We've heard a lot about the rare earth metals, but it strikes me that when we're talking about electrification of our whole energy system, one of the elements we have to talk about is copper. If we're going to move that electricity around, we'll need a lot of wire.

I wonder if you want to spend some time commenting on Canada's opportunity in copper. I know copper mining built my riding 100 years ago. There are still some big mines just outside my riding.

Could you talk about copper, our opportunities there and what we can do?

Mr. Ilan Bahar: Sure, I'd be happy to.

I completely agree with your comments. Copper is critical for this transition. Think about charging stations alone and the need for copper to support electric vehicles. Canada has a great skill set in copper. There are many mines throughout the country in various provinces. We're a big producer.

Mr. Merlini spoke about Vale's copper production. We have mines on the west side of the country and mines throughout. As well, a large number of junior companies are looking for funding to either explore for mines or develop mines.

We have a clear skill set. I think the capital markets are well aligned across base metal companies. The world will absolutely need more and we're well positioned to deliver it.

• (1415)

**Mr. Richard Cannings:** To continue on with that, in terms of developing these new mines, both you and others talked about getting more clarity and more efficiency in moving these mines along.

Several people have talked about the role of indigenous people in the mining industry.

I wonder if you could comment on how implementing the principles of UNDRIP might bring some of that clarity to the industry and help us in that regard.

**Mr. Ilan Bahar:** Obviously, a number of competing factors are at play. Capital markets like to see processes streamlined and like to see investments advance exploration to development to mines. Certainly that's what investors like to see.

Government obviously has to weigh a number of factors in allowing development to happen to make sure that those factors are considered appropriately, while at the same time satisfying investor needs.

I think there's a balance at play. For us, I come back to what I said initially, which is that whatever can be done to streamline processes is constructive and positive for supply chains in Canada.

The Chair: Thank you, Mr. Cannings.

We'll go to Mr. Lloyd for five minutes.

Mr. Dane Lloyd (Sturgeon River—Parkland, CPC): Thank you, Mr. Chair.

This question might be best directed at Mr. Fung from Torngat.

You were talking about dirigibles and things like that. It's one thing to get the mines approved. It's one thing to get the production going, but if we don't have the supply chains to connect these mines, many of which are in remote areas, to the networks, then we're not going to get the kind of production and growth that we need.

I would note that with countries like China with their one belt, one road initiative and numerous countries, it's really the governments that are investing huge in the infrastructure, sort of with the mentality of "if we build it, the companies will come".

I wonder if you could comment on what Canada's strengths or weaknesses are when it comes to supporting the mining industry through infrastructure.

**Mr. Robert Fung:** First of all, I won't comment on the mining sector as a whole, but I will comment specifically on the rare earths.

The issue on the particular rare earth situation is that when you have a country like China controlling so much of the world's supply, they can move that commodity price up and down, as they did in 2011. They have the ability to move it from what in essence is a profitable entity into a losing entity. That's why you need the government to step in to go alongside investment and say they understand what's going on, but they are saying to the marketplace that this is going to happen. We are going to be a producer of these particular rare earth oxides, which are needed to make the permanent magnets for electric motors. Once the government steps in alongside the private investor to get this done, the marketplace will then step in.

What the marketplace is concerned about is the fact that when you have a state like China controlling so much of that market, they can move that commodity price up and down. That is the issue with the rare earths. That is not the issue, as I understand it, right across the mining spectrum.

**Mr. Dane Lloyd:** Then the manipulation of the prices of these rare earth commodities is destabilizing investment in this industry. Do you think it's being used as a political power tool to prevent other countries from effectively developing their own rare earth mineral industries?

**Mr. Robert Fung:** I won't comment on the fact that it is being used as a power tool. Let me suggest something, a way for you to take a look at it as the Government of Canada.

Think in terms of, let me say, a triangle. You have trillions and trillions of dollars of industry sitting on one particular point. What is that one particular point? It is literally the key piece of all the technological industries. It's the rare earths. We happen to have them here in Canada, which is why I'm imploring the Government of Canada not to lose this opportunity.

This is not something that's occurring all over the world. Outside of China, it's us in Canada and Australia. The Australians have taken the lead. They're maybe a year to two years ahead of us. We have the ability now, as we're sitting right next to the largest market. If the Government of Canada steps in, as an example with Torngat, and says to the marketplace that we are going to supply this material by 2025-26, whatever the time frame is that you decide, industry would look at that and step up.

## **(1420)**

**Mr. Dane Lloyd:** You broached a really important point here. You're talking from an economic perspective, sitting on this very important pillar, the rare earth metals. I'm wondering if you could comment on this from a national security perspective. This is the natural resources committee, but we know access to these minerals is critical for our national security and the national security of our allies, especially in NATO.

I'm wondering if you can comment on how the failure to get this right could impact our national security.

**Mr. Robert Fung:** That's the image I just tried to paint for you in, let me call it, too subliminal a manner. Again, think of all these industries sitting on this pinpoint, the rare earth industry. That rare earth industry is today controlled by China. We have the ability in Canada to step in and be that pinpoint, right next to this massive economic juggernaut south of the border.

From a national security point of view, I would like to remind this committee to think back to about a year ago when we had the issue when essentially we were looking for PPE coming from south of the border, when we had to throw everything on the table. We had to put all the chips we had on the table to make sure we had this PPE. This is a very serious chip.

That's what I'm trying to implore you to think about.

The Chair: Thank you, Mr. Fung. Mr. Dane Lloyd: Thank you. The Chair: Thank you, Mr. Lloyd.

We'll move over to Mr. May for five minutes.

Mr. Bryan May (Cambridge, Lib.): Thank you very much, Mr. Chair.

Again, thank you to all the witnesses for taking the time to help us with this study today.

My questions also are going to be directed to Mr. Fung.

I'm the member of Parliament for the riding of Cambridge, and we have Toyota Motor Manufacturing Canada in our backyard. The whole idea of manufacturing for the future and making sure that we have what we need in terms of the supply chain is speaking to me quite a bit throughout this session.

I'm very thankful that when you made your opening statement, you were talking about not only the approach of controlling the supply chain but also how you were doing it and the environmental initiatives that your company is actively employing to move the products. That's just a comment of thanks for that.

I was very interested. I wasn't sure if anybody would pick up on the batteries comment, and I'm very thankful that's been a dominant conversation—excuse me, not the batteries, but magnets—because we have talked a lot in this committee about the need for the rare earth elements when it comes to batteries, but not so much for other parts of the EV business.

I'm wondering if beyond the magnets there are other components that you're aware of that rare earth elements play a part in.

Mr. Robert Fung: The rare earth elements play a part in literally.... There is nothing in the new industry that rare earth elements don't play a part in. You just look around. Anything you have that's technological, there are rare earth elements in it, whether it's in TV screens to make them brighter.... However, if we are serious about getting to a lower-carbon economy.... Again, you have a fuel and you have your power, so the permanent magnets.... Literally everything requires an electric motor. Everything we can think about requires an electric motor, whether it's a defence capability, whether it's transportation, whether it's things that you use in your normal household. They all require electric motors, and the most efficient electric motor is the permanent magnet electric motor.

## • (1425)

**Mr. Bryan May:** This might not be a fair question for you, sir, but do you know whether or not these components can be recycled?

**Mr. Robert Fung:** I believe several of the components can be recycled. In fact, that is something that the Americans have been trying to do, taking a look at actually recycling some of these components.

However, in the case of Torngat, our process really incorporates both. It incorporates the mining and the recycling. Recycling's a small piece of it, but the production chain will use recycled materials. **Mr. Bryan May:** I think it's going to become a much bigger component, if I could be so bold as to say that. As we start seeing more and more EVs on the road, for example, the need to manage the end of life of these vehicles is going to be critical. Also, the term "resale" is going to have a very different reality if the batteries can't be swapped out or recycled or replaced.

I don't have much time left here, but I think I have about another minute, if I'm not mistaken.

You brought forth in your statement some very solid recommendations, I might say. One of them—I think the first one—was regarding a deadline. Could you advise us in terms of what you would see as a reasonable deadline for the government to demonstrate its commitment?

**Mr. Robert Fung:** Within the next three months. You've been working on it for some time.

Mr. Bryan May: So soon?

Mr. Robert Fung: Yes, absolutely.

Mr. Bryan May: Very soon. Sooner rather than later.

Mr. Robert Fung: Absolutely.

Mr. Bryan May: Okay, fair enough.

What would you say the first step of that would be?

Mr. Robert Fung: Well, essentially, to talk in terms of how you.... The first thing you have to address is how you finance this and be given access, essentially, to some of the funding mechanisms. The problem is that we've looked at umpteen funds that have been administered, but there aren't any programs that give rare earth minerals access to this funding. This is something to be done right away.

Mr. Bryan May: Thank you, Mr. Fung.

The Chair: Thank you, Mr. May. You're right on time, which is appreciated.

We go now to Ms. Falk for five minutes.

Mrs. Rosemarie Falk (Battlefords—Lloydminster, CPC): Thank you, Mr. Chair, and thank you to the committee for having me today.

It's great to see Mr. Austin here. It's nice to see a bit of Saskatchewan in Ottawa. I appreciate that. I'm on the western side of the province. I've come across many people who work in Cigar Lake, who travel and commute there.

Companies, especially in the field you are in, sometimes get a bad rap. It's great to hear how your company cares enough about the community in northern Saskatchewan to temporarily halt production for safety during this time. I want to give a shout-out for that. Sometimes you guys don't get enough credit where credit is due on that aspect.

There has been a lot of conversation here about exploring, developing, producing and refining. Canadians have a vast skill set. We have the skills, the talent, the ability, and the people to do a lot of that work here in Canada.

The Mining Association of Canada said that in 2018 only 15% of the workforce were women, and that it had actually gone down since 2011.

Could anybody mention why that might be? Why are we actually seeing a decline? This was before COVID, obviously. This was in 2018. Why was there a drop in women's participation in the workforce when it comes to mining?

Does anybody want to take this question?

**The Chair:** Are there any takers?

Why don't you pick someone?

Mrs. Rosemarie Falk: Let's go with Mr. Austin since he is in Saskatchewan.

Mr. Dale Austin: First, thank you for your kind words about

I admit that question is not in my field of expertise. I would not want to mislead the committee. I'm certainly happy to get back to the committee with Cameco's experiences in terms of women miners and women employees in our company. I do not have that information at hand today.

• (1430)

**Mrs. Rosemarie Falk:** Thank you so much for your honesty on that and for being willing to provide that to the committee.

As Mr. Cannings mentioned with regard to indigenous participation, it's important that we also make sure we have women's participation in some of these non-traditional fields. That doesn't necessarily mean wearing a mining hat and going in there, but it pertains to management positions or office-type positions.

Mr. Austin, has Cameco experienced any inconsistency when it comes to regulatory obligations, when it comes to new projects? Is that an area you're developing or exploring?

**Mr. Dale Austin:** Not recently. Cigar Lake was the latest mine that we brought online. That was a number of years ago. We have not had the opportunity yet to put a new project forward under the new regulatory process. Until we have experience there, I can't really answer the question.

We're a heavily regulated sector. We work regularly with the Canadian Nuclear Safety Commission. In terms of the environmental regulatory process, we have not had any recent experiences.

**Mrs. Rosemarie Falk:** Is the reason for not applying attributed to the decrease in uranium prices you mentioned earlier?

**Mr. Dale Austin:** Market conditions are a large factor there. The ongoing low price of uranium certainly has a bearing on when we would consider making applications and looking at new projects.

Mrs. Rosemarie Falk: Wonderful.

Thank you.

The Chair: Thank you, Mrs. Falk. You're right on time. That's always appreciated.

Mr. Lefebvre, it's over to you for five minutes.

# Mr. Paul Lefebvre: Thank you, Mr. Chair.

Again, thank you to the witnesses for being here. This is something that is dear to my heart, as I've said before, being in the nickel capital of the world. We call ourselves the mining innovation capital of the world as well.

Before I ask some questions of the Vale folks, Mr. Fung, you talked a lot about China and their role. The challenge we have is that China's economy is not like Canada's. We're a market-driven economy and they're a state-owned economy. They get to pick and choose which lane they're going to go in and basically put all their efforts and control into their markets.

That being said, you mentioned as well the importance of multilateralism in this file with Australia, the U.S. and the EU. What are your thoughts on where we're at in that space now, and where do you think we could put more effort into that?

**Mr. Robert Fung:** That's a really loaded question. I think the first thing we did was we essentially recognized that there is an issue. I mean, how was it possible that we could actually let ourselves get into a position where one state controlled so much of a product that is vital to all economies? The first thing we did was to recognize that there is an issue.

The second thing we're doing, which I think is correct, is essentially trying to strategize with respect to who has what, in what markets, and where our strengths and weaknesses are. We know where the two big demand markets are. The first big demand market is the United States. The second big demand market is essentially the EU. Then you can pick up wherever else you want to pick up.

A lot of the manufacturing today, especially in this particular issue that I'm talking about, the making of electric motors.... Essentially, most of that is done in the east. America has recognized its vulnerability. The Europeans have recognized their vulnerability. They're beginning to put in place the new supply chains. Those multilateral conversations are taking place.

From Canada's point of view, I am trying to point out to Canada that within that entire spectrum, we have a very, very unique opportunity. That's the opportunity that I am trying to point out that we have to focus on.

• (1435)

Mr. Paul Lefebvre: Thank you. I appreciate that.

Ms. Concepcion or Mr. Merlini, perhaps I can ask you to opine on that as well. Your company is international. You have assets not only here in Canada but around the world. How are you seeing these market forces? Again, in my first intervention I talked about having a made-in-Canada solution. Having everything here would be the best-case scenario from a Canadian perspective, but from a market perspective, that's not always the case due to market forces and certainly the multilateralism that comes into play.

In your experience, certainly being an international company, how do you see this space developing on the nickel side, the cobalt side and the copper side in the building of that value-added chain? What challenges and opportunities do you see because of this world structure that we have now with the geopolitical situation?

Mr. Juan Merlini: Thanks, Mr. Lefebvre, for the question.

Yes, we are seeing a lot of movement in different regions. As an example, in the U.K. there is a battery hub being developed. There is strong support from the U.K. government in order to foster that industry.

Mr. Paul Lefebvre: Let me stop you there.

How many minerals and metals does the U.K. have on their lands to produce those batteries?

Mr. Juan Merlini: It is very, very, very limited.

Mr. Paul Lefebvre: Thank you. That's what I thought.

**Mr. Juan Merlini:** That's the point we have been telling them. It's not about fostering a battery hub there. The issue is, where is the upstream part of that? Another example that is very strong, and that most of you have heard about, is Indonesia. The Indonesian government is really fostering big support, as they have very large resources of nickel, competing with our Canadian nickel, and a whole investment in the supply chain for the EVs.

Yes, we are seeing that. I think this will continue, as the supply chains will become more critical for the auto industry.

The Chair: Thank you, Mr. Lefebvre.

Mr. Paul Lefebvre: I could go on and on, but again, I really want to thank the witnesses on this.

Thank you.

The Chair: Mr. Simard, we'll go over to you for two and a half minutes, please.

[Translation]

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

Mr. Fung, I know we've had a lot of questions for you today, so I'm sorry, but I have some more.

As you may know, under U.S. law, aluminum is a national security consideration there. The U.S. typically sources its aluminum from Canada and especially from Quebec.

Earlier, when you were talking about rare earth oxides and permanent magnets, I raised an issue that had come up during our first meeting and relates creating reserves of rare earth and critical minerals in Canada.

Shouldn't the government make sure that a significant portion of these types of natural resources stay in Canada and are processed here? Do you think we should we have laws about that?

[English]

Mr. Robert Fung: That's a tough question.

You have to balance essentially three things. You have to balance whether you hold the resource in the ground. The second thing you have to balance is what the marketplace is going to do. Will there be other sources of supply? The third thing you have to balance is the financial marketplace, because if you start putting too much regulatory in the way of the overall marketplace, the financial marketplace looks at that as a negative. It's a very delicate balance, but I think we've shown that we're pretty good at dealing with this balance.

[Translation]

Mr. Mario Simard: Thank you.

We know the U.S. is going to re-enter the Paris agreement.

Earlier, you told me about permanent magnets and how we can develop that sector.

It seems to me that, for transportation electrification, the U.S. would be more interested in sourcing its materials from Canada than from China. China is a big player, so shouldn't we see this as an opportunity for Canada to develop this market? That means making sure we have the resource. That's what I mean by that.

Do you think there's something to what I'm saying?

**(1440)** 

[English]

**Mr. Robert Fung:** We have the resource available, and essentially the big market is sitting to the south of us. It's very easy to access that market. In terms of our overall strategic development with that market, this is something that we have to balance. How do we develop it, how fast do we develop it and how much of the downstream do we retain here in Canada?

What I would like to encourage is that we have a very highly skilled workforce and we should develop a lot of that downstream here in Canada.

The Chair: Thank you, Mr. Simard.

Mr. Cannings, we'll go over to you.

Mr. Richard Cannings: Thank you.

I'll follow up on my question to Mr. Bahar in my last round and pose the same one, more or less, to Mr. Merlini.

Vale is a big company with operations around the world. In your testimony, you talked about the need for more certainty.

I'm wondering about the Declaration on the Rights of Indigenous Peoples, which the federal government is moving forward on and which British Columbia has passed legislation on. This is partly in response to some pretty disastrous examples of resource extraction and their impacts on indigenous people—the Giant Mine in Yellowknife, for instance.

Some of the mining developments that have suffered real delays have suffered because they forged ahead without informed consent of indigenous people. Do you think that the United Nations Declaration on the Rights of Indigenous Peoples would help bring that certainty to mine development and investors and help us move forward more quickly?

**Mr. Juan Merlini:** Yes, I do believe the mining industry is going through a big transformation, and it seems that all the ESG compliance is something that will become mandatory. Having the "S", social, embedded in the companies is something we, Vale Canada, are taking as a very strong commitment, and I think that this will be differentiating companies in the mining sector.

We are moving in the direction, particularly in our operation in Voisey's Bay, with a partnership with the indigenous communities, of increasing significantly the number of employees from indigenous communities. We have been partnering in order to develop the communities. Just as an example, at Voisey's Bay, we have 43% aboriginal employment in our operations.

This is something that will be more than just a statement, something that we need to be putting into practice in the whole industry, and Vale is taking it very seriously.

I'd just like to comment very quickly on one point.

The Chair: Comment very quickly, please.

Mr. Juan Merlini: Ms. Falk mentioned the number of women in the mining sector. I'd just like to share that Vale is on the other side and that in 2020, we achieved a 20% increase in women in our workforce. We provided technical training for more than 500 newly hired women to work in operational roles. Vale is also very committed to the D and I agenda, and we saw in 2020 the opposite trend from what we have seen in the industry.

The Chair: Thank you, Mr. Cannings.

Members, it's 2:44 p.m. by my clock here. We're supposed to stop at 2:45 p.m.

We do have some committee business. We've allocated 15 minutes. It will probably take less than that. We have Mr. McLean and then Mr. Sidhu last, and I'm prepared to go ahead with them. I'll even cut Mr. Sidhu short, if people want to do that. Then we could finish this round and go into committee business, but it means we might be here until 3:10 p.m., if that's okay.

I'm not hearing any objections.

**●** (1445)

Mr. Greg McLean: Sounds great.

The Chair: Okay, great.

Mr. McLean, the floor is yours.

Mr. Greg McLean: Thank you, Mr. Chair.

You can't see my video. Something has happened with the computer and it doesn't recognize my camera suddenly and—

The Chair: We know what you look like.

Mr. Greg McLean: It is me.

I have a lot of questions here.

First of all, let me go to Mr. Austin from Cameco.

Mr. Austin, can you tell us how much of your current supply goes toward Asian markets? Break that down, please.

**Mr. Dale Austin:** Certainly. Our major Asian markets would be South Korea, Japan and China, and I would say probably in the neighbourhood of 25% of our sales go into those markets.

**Mr. Greg McLean:** Broken down by South Korea, Japan and China, how much is it for each?

**Mr. Dale Austin:** For South Korea, Japan and China, Japan is about 14%; China is 10% and South Korea, depending, is somewhere in the neighbourhood of 5% to 10%.

**Mr. Greg McLean:** As for your forward growth perspective, as for what you see on the horizon here for when you restart McClean Lake and McArthur River, where do you see that supply going?

Mr. Dale Austin: Our largest customer continues to be the United States at about 30%. They have the highest number of reactors operating in the world right now. The largest growth opportunities, frankly, are in China and India. Both have announced significant nuclear power growth programs, and that's where the markets are leaning.

**Mr. Greg McLean:** Most of your competitors who are building mines in Saskatchewan in your resource belt there, how many of those...? Were you seeing competition from Chinese-owned or Chinese-financed entities?

**Mr. Dale Austin:** That's a very good question. I know they're actively pursuing opportunities there. The foreign investment considerations come into play, so it's hard to say at this point

**Mr. Greg McLean:** They're actively looking. When those companies are established in Saskatchewan, does the supply go directly to the owner then, or does it go on to a market for clearing?

**Mr. Dale Austin:** It would depend on the offtake arrangements that were in place between the entities, so it's hard to say. We wouldn't have a look-in on that.

Mr. Greg McLean: Okay, thank you.

Mr. Fung, I have a question for you.

I really appreciate that you understand and were able to illustrate to us that battery storage is only energy storage, whereas what you're talking about is electromagnetic power, so a much different concept than a battery-powered car. That's an important distinction.

If you actually move toward an electromagnetic engine producing power, how much would you be able to provide from a mine such as yours, or anything else, outside of the major dominant party right now, which is China?

Mr. Robert Fung: I can't tell you with respect to China, but I can tell you when we really take a look at all the resources outside of China, that the resources available in our particular mine, or our particular mining area in northern Quebec, is greater than all of the rest of the projects combined.

Mr. Greg McLean: Okay.

Ms. Concepcion, I think I have time for a question for you.

Can you talk about battery electric vehicle supply? As Mr. Brosseau indicated earlier, with costs going forward that are going to increase because of the finite supply, can you actually talk about what the costs look like on a forward-curve basis for these key elements?

Ms. Nancy Concepcion: Thanks for the question.

It's not necessarily about the cost of the individual materials that go into the battery specifically. I'll focus my discussion on costs there. I'm not sure if that's what you meant.

What's happening in the market is that the costs of those materials fluctuate based on supply and demand, certainly, but the cost overall of the battery has been going down and has dropped significantly.

**Mr. Greg McLean:** I'm talking about the costs for the supply of the metal that's going to go into the battery as it becomes more and more finite.

**Ms.** Nancy Concepcion: The cost of the raw materials, then, will obviously vary depending on the raw material. In the case of nickel, there is a wide variety of costs depending on the product, the quality of the product, the jurisdiction of the product and the type of environment in which it was mined. It can vary widely.

Naturally, as we progress forward, we would anticipate those costs to fluctuate somewhat as well, as new supply comes on board. A lot of it has to do with if the product has to be processed, if it has to be processed further. Some products need more processing than others.

Those costs can be all over the board. I think if we look at forward projections and we anticipate the market being in a significant deficit, of course we would expect the price of the product to increase. What we as an industry really would like to do is to assure the market that the product will be there, and control the price to the point that we don't scare the OEMs away into investing in new technologies and moving away from nickel.

We want to ensure that the supply is there.

• (1450)

Mr. Greg McLean: Thank you.

The Chair: Thank you, Mr. McLean.

We'll go over to Mr. Sidhu to conclude the questioning.

If you want to have less than your full five minutes, I'm sure everybody would be grateful.

Mr. Maninder Sidhu: No problem. Thank you, Mr. Chair.

Mr. Bahar, you didn't get a chance to say much about your field here, but what types of private sector investments need to be made in the mining industry to fully realize critical minerals development potential? I'll also give you some extra time to add any points that you didn't get to mention today.

Mr. Ilan Bahar: Thanks for the open-ended question. I appreciate it.

I think we're fortunate. We're at a moment in time where every-body realizes that electric vehicles are here. There's no question that they're here. If it's a question of when, there are a variety of forecasts around of when exactly various parts of the world will adopt electric vehicles, but it's coming. We all know it is. The markets are attuned to it. Investors know that this is coming. They know that commodity prices should perform well on the back of it, and they're actively looking for opportunities.

I think the capital you need, whether it be institutional investor capital or whether it be private equity, is, generally speaking, available to the sector. Ultimately, it's a question of investing in the assets that are most attractive and investing in the assets that have the management teams that can actually deliver on building those mines.

I think the components are all there, is my answer to you. I think the capital exists. It is about incenting investment. As I mentioned consistently in my comments, it's about as best as possible providing the most reliable, transparent regulatory system for investors to feel like they can put their money where the projects are.

I hope that answers the question, but as I said, I think the market knows this is here, and investors are keen to put their capital to work.

Mr. Maninder Sidhu: Thank you, Mr. Bahar.

Mr. Chair, I'll take this opportunity to thank all our witnesses for taking the time to be with us today. Quite a lot of insights were provided today. I learned a lot.

The Chair: Thank you.

Yes, let me add to that. This was a great panel. You can see we never have enough time. We could go on for much longer, but we're restrained by the time limits we have. We want to thank all of you for taking the time today to share your knowledge with us on a very important topic. You're free to go.

If everybody else would stick around for a few minutes, I'd be grateful. Thank you.

[Translation]

Mr. Christian G. Brosseau: Thank you very much.

[English]

The Chair: There are two things.

One is that last week everybody should have received by email a copy of the budget proposal for this study. It's \$4,350. Essentially it covers the cost of the headsets and all the technology associated with getting witnesses here by Zoom. There's no magic to it. There's no food on it, so we don't have to discuss important things like that, but we need to approve the budget.

Unless anybody has any questions, could I see a show of thumbs, maybe?

Mr. Greg McLean: My thumb is up.

• (1455)

The Chair: I was going to say, Greg, I'm assuming your thumb is up, but thank you.

(Motion agreed to)

The Chair: Okay, that's great.

The only other thing I want to talk about today is our schedule for the next month and a half, mostly because during that period there are several non-sitting weeks, starting with next week. When we come back on March 22, the minister will be appearing before the committee to discuss estimates. Then on Friday, March 26, we will have another panel on this study on critical minerals. I might add some committee business at the end of that, for reasons I'll explain in a moment.

Then there's a two-week non-sitting period, and then we return on April 12. That is currently scheduled to be our last day of witnesses for this study. We don't have a further study wound up yet. By then we will have the draft report on the forestry study, which we can start looking at on Friday, April 16. I hate to say this—I'm cursing myself—but I suspect we can get that done on April 16 and no later than April 19, the Monday.

Then the question is what we are going to do after that. I am proposing that next week when we're not sitting, hopefully next Thursday, the subcommittee can meet, which would be Mr. Simard, Mr. Cannings, Mr. McLean, Mr. Lefebvre and me, at which time we can review proposals for further studies. I know some have already been put forward, but if people have any others in mind, please get them to us before March 18. Then on March 18 we can review them and come to some agreement. Then at the committee business period in the meeting on March 26, hopefully we can adopt that report, which will determine what we'll be doing after April 19. That would give everybody ample time to put their witness lists together and would allow our clerk and analysts to get everybody wound up to get rolling after that.

That is the schedule going forward. It's straightforward, but there are going to be some gaps. I thought it was important that we try to get ahead of it so we're not sitting here in April trying to plan our schedule on short notice.

Does anybody have any questions or anything they'd like to add to that? No.

Okay, that's great. I spoke to Mr. McLean earlier about this. He asked what we needed 15 minutes for. He was right.

Before anybody changes their mind, I'm going to say thank you. Enjoy the weekend and next week. I'll get an email out to those of you on the subcommittee for next Thursday and we can go from there

I will conclude with where I started and wish everybody a happy Irish heritage month. Thanks a lot.

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