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Chair: Mrs. Sherry Romanado



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• (1105)

[English]

The Chair (Mrs. Sherry Romanado (Longueuil—Charles-LeMoyne, Lib.)): Good morning, everyone. I now call this meeting to order.

Welcome to meeting number 35 of the House of Commons Standing Committee on Industry, Science and Technology.

Today's meeting is taking place in a hybrid format pursuant to the House order of January 25, 2021. The proceedings will be made available via the House of Commons website. So that you are aware, the webcast will always show the person speaking rather than the entirety of the committee.

To ensure an orderly meeting, I would like to outline a few rules to follow. Members and witnesses may speak in the official language of their choice. Interpretation services are available for this meeting. You have the choice at the bottom of your screen of floor, English or French. Please select your preference.

I will remind you that all comments by members and witnesses should be addressed through the chair. Before speaking, please wait until I recognize you by name. When you are not speaking, your microphone should be on mute. For the sake of the interpreters, please do not speak over each other.

As is my normal practice, I will hold up a yellow card when you have 30 seconds left in your intervention. I will hold up a red card when your time has expired. Please keep your screen in the gallery view so that you can see me showing you the cards. Also, as we have a very tight schedule today, I do not want to intervene when you go over, but I will.

Pursuant to Standing Order 108(2) and the motion adopted by the committee on November 5, 2020, the House of Commons Standing Committee on Industry, Science and Technology is meeting today to continue its study on the green economic recovery from COVID-19.

I would like to welcome our witnesses.

Today we have with us, from Analytica Advisors, Ms. Céline Bak, president; from ERA Environmental Management Solutions, Mr. Gary Vegh, senior environment toxicologist and co-chief executive officer, and Ms. Sarah Sajedi, chief technology officer and co-chief executive officer; from the Forest Products Association of Canada, Mr. Derek Nighbor, president and CEO; from GreenCentre Canada, Ms. Lynne Manuel, executive director, and Mr. Andrew Pasternak, director, commercialization and business development;

Dr. Heather Exner-Pirot, fellow of the Macdonald-Laurier Institute; and, from SRG Mining Inc., Mr. Benoit La Salle, executive chairman of the board.

Each witness will present for up to five minutes, which will be followed by rounds of questions.

With that, we will begin with Ms. Céline Bak.

You have the floor for five minutes.

[Translation]

Ms. Céline Bak (President, Analytica Advisors): I would like to begin by stating that my home is on the unceded territory of the Algonquin Anishinaabe Nation, and that this land has contributed to my privilege.

I want to thank those who are working to protect and care for us during this pandemic.

Distinguished members of the Standing Committee on Industry, Science and Technology, thank you for this opportunity to participate in the committee's work.

As people who believe in the importance of government and public policy, we are compelled to think about how we can build back better after this pandemic.

My name is Céline Bak, and I am president of Analytica Advisors. I work as a global management consultant on ESG projects for large and small companies, and as an expert in sustainable finance policy.

Achieving a 45% reduction in Canada's greenhouse gas, GHG, emissions by 2030 is an important part of building back better. We must also ensure that we take care of the young and the old, and enable everyone to contribute fully to our society.

[English]

In regard to innovation, science and technology, the Government of Canada's recent budget signalled its intent to build an equitable society that works within the planet's boundaries, that is to say, an intent to build back better. This committee is undertaking its work at a time when an important consensus is forming and policies are coming together on how to build back better.

I will speak of three threads: one in Canada, one in the European Union and one in the U.S.

The first thread, from Canada, is that clean technology was one of nine economic sectors analyzed as part of innovation, science and technology's Industry Strategy Council. The council's report, "Restart, recover and reimagine prosperity for all Canadians", was published in December 2020.

One of the council's recommendations called for an industrial strategy that included deployment of made-in-Canada clean technology within each of these four pillars: first, become a digital and data-driven economy; second, be the ESG world leader in resources, clean energy and clean technology; third, build an innovative and high-value manufacturing sector where we can lead globally; and fourth, leverage Canada's agri-food advantage to feed the planet.

These are important conclusions, which I recommend for the committee's consideration.

The second thread, from the European Union, is its industrial strategy, which overlaps with the council's recommendations and signals a strong consensus on the opportunity for zero-carbon and digital industries. In fact, half of Europe's 673-billion euro recovery and resilience fund, to be invested before 2024, is directed at stimulating private sector investment. If adjusted to Canada's GDP, this stimulus would be equal to \$13 billion in annual public stimulus over the period 2021 to 2023, about \$3 billion a year more than what was recommended in the building back better Canada plan published last summer.

I recommend that the committee consider that to be awarded EU recovery and resilience funds, private sector proponents must propose projects that meet the following criteria: first, ensure a three- or four-to-one leverage of private sector investment to public sector stimulus; second, advance the EU's goal of a 55% reduction in GHG emissions by 2030; and third, for projects led by large firms, engage as partners, at least four SMEs, to ensure that companies that are scaling up have access to large and growing markets and can participate in high-growth digital and zero-carbon industries.

In Canada, we have many firms that are ready to deliver fully commercial, sustainable products. We invested in them many years ago through globally leading technology organizations, such as GreenCentre Canada, Emissions Reduction Alberta and Sustainable Development Technology Canada.

For example, since 2009, ERA has committed \$646 million to 204 projects worth over \$4.5 billion to support the development and adoption of technologies to reduce emissions.

• (1110)

We can expect the same from our neighbours to the south, which is the third thread in the consensus that I wanted to speak to today.

In the U.S., I suggest that the committee keep a clean eye on the clean future act, the act which directs each federal agency to develop a plan, using existing authorities, to achieve the U.S.'s national climate goals in combination with all other agencies. It creates a process for public review, as well as review by the EPA, before each federal agency submits its plan to Congress and begins implementation. It further requires each agency to review its plan at least every two years and to submit an annual report to Congress.

[*Translation*]

If Canada took the same approach, the Standing Committee on Industry, Science and Technology would be asking the Minister to present the department's plan to reduce emissions by 45% by 2030 in his areas of jurisdiction. In addition to the Net Zero Accelerator fund announcements, the Minister's plan would include a report on emissions from all industries under his jurisdiction, including the automotive, aerospace, rail, pharmaceutical, defence and telecommunications sectors.

Thank you for your attention.

The Chair: Thank you very much.

[*English*]

We will now go to Forest Products Association of Canada.

You have the floor for five minutes.

Mr. Derek Nighbor (President and Chief Executive Officer, Forest Products Association of Canada): Thanks, Madam Chair. I am Derek Nighbor with the Forest Products Association of Canada in west Ottawa, on the traditional unceded territory of the Algonquin Anishinabe people. Thanks for the opportunity to be here today.

I want to start by saying that in large part because of the hard work of our over 200,000 forestry workers across the country, our supply chain partners, our industry's deep commitment to health and safety and swift federal and provincial government actions during this pandemic, our sector has been one of the bright lights in the current economy. For the most part, we've been able to keep our people working, deliver essential products to Canadians and contribute to increased levels of revenue to governments across the country over the past year. While many parts of our industry were forced to shut down or limit operations during the first couple of months of the pandemic as customer orders collapsed and prices in lumber and other wood segments plummeted by over 30%, we quickly got people back to work safely and got our part of the economy moving again. We've been working non-stop since.

One of our proudest moments, with the support of Natural Resources Canada and Canadian scientists and researchers at FPInnovations, was the development of a world first—a biodegradable non-medical mask made from what would otherwise have been wood waste from Canada's sustainably managed forests. We're pretty proud of that. We thank the government for its support in launching that innovation.

As we think about recovery and our ability to be self-sufficient, we in Canada continue to be in a unique position to leverage the power of our sustainably managed forests and Canadian-made forest products for our people. The products range from lumber for building construction and home renovations to toilet paper, sanitary wipes and paper towels. They range from pulp for protective masks and hospital gowns to biofuels for heating systems. As the government advances its post-pandemic recovery plans, we in Canadian forestry can sustain jobs, attract more global investment, get more people working and be a leader in our shared move to a lower-carbon economy. We will need some help, and we will need the government to do things a little bit differently to help us get there.

Our low-carbon, job-creating solutions are many, and they exist right across the value chain. As the Speech from the Throne said last fall, “farmers, foresters, and ranchers [are] key partners in the fight against climate change”, and governments need to support “their efforts to reduce emissions and build resilience.” We couldn't agree more.

We've been somewhat challenged by the government's well-intended yet siloed approach to leveraging some of forestry's environmental and economic solutions. We'd strongly endorse an approach similar to some of our peer nations, such as Sweden and Finland. They have done really robust, sector-wide and very deep full value chain approaches to recovery to maximize carbon and broader environmental benefits and recovery and job opportunities.

Our solutions start in the forest through ecosystems-based management under the purview of provincial governments. They're informed by robust local consultation. This is important work that involves dealing with many values, including dealing with pest and catastrophic fire risks and keeping communities safer from fire. It extends to opportunities to build more with carbon-storing wood products and accelerate the forest-based bioeconomy so that we can bring more environmentally friendly products to Canada and the world.

Back in December, we released a report that provided a bit of a road map for the government to consider under the guise of pandemic recovery. I want to share a few of the top lines from that report, which you can find on FPAC's website.

Today we have over 140 shovel-ready projects across the country, worth over \$1.5 billion, that can improve Canadian competitiveness, lower our carbon footprint, save jobs and create new ones. We have solutions to advance renewable fuels development and to accelerate the Canadian Council of Forest Ministers' forest bioeconomy framework. We can ensure that forest management and the conservation measures within Canada's managed forests are recognized as nature-based climate solutions and help us achieve our conservation and carbon goals.

We need to recognize that worsening fire and pest outbreaks are seriously impacting our country's carbon story. According to the last state of the forest report by NRCan, 251 megatonnes of carbon went up into the air just from forest fires alone. That's an important consideration as we think about carbon and conservation policy going forward. We do have growing concerns around the lack of alignment between federal and provincial governments on forest policy and duplicative regulations that are creating confusion and adding costs.

In closing, the government has stood with us quite firmly in the face of the softwood lumber debate. We would like the government to continue to stand with us as we deal with some anti-forestry bills coming out of the state legislatures in New York and California that are fuelled by anti-Canadian resource activists. I'd be happy to talk about that more.

• (1115)

At this point last year, I was the toilet paper man. This year, I'm the lumber man. I'm happy to answer any market-related questions during the Q and A.

Thanks for the opportunity.

The Chair: Thank you very much.

We'll now go to ERA. Mr. Vegh and Ms. Sajedi, you have five minutes.

Ms. Sarah Sajedi (Chief Technology Officer and Co-Chief Executive Officer, ERA Environmental Management Solutions): Distinguished members of the House of Commons, thank you for inviting us to speak with you.

We would like to begin by acknowledging that ERA is located on unceded indigenous lands. Montreal is historically known as a gathering place for many first nations. Today it is home to a diverse population of indigenous and other peoples. We respect the continued connections with the past, present and future in our ongoing relationship with indigenous and other peoples within the Montreal community.

My name is Sarah Sajedi. I have my partner, Gary Vegh, with me. He's the senior environmental toxicologist and I am the chief technology officer. We both are chemists. We have been working for the past 26 years-plus in the area. ERA is a Montreal-based software developer which works closely with manufacturers to create solutions for their sustainable problems and minimize their emissions in waste and water, and any other environmentally related media.

ERA has worked for 26 years with industries, like wood cabinetry and furniture, automotive, chemicals and paints and the general manufacturing sector. We are global leaders in environmental health and safety software for the automotive industry. A vast majority of OEMs are currently using ERA software to track their environmental impacts.

I would like to use this opportunity to talk about waste minimization. ERA believes that waste minimization is one of the issues. That is our platform: greener industrial and consumer packaging, and how to minimize the waste we are creating and the global impacts it has on both our economy and future environmental sustainability.

I have some simple facts about waste. Canadians throw away three million tonnes of plastic waste, only 9% of which is recycled. This means the vast majority of plastic ends up in landfills. Approximately 80% of plastic waste that ends up in bodies of water comes from the land. As a result, there is a cost of clean up. Canada pays to ship 12% of its plastic to Southeast Asia, which has caused quite a bit of issues. Oceana Canada estimates that the cost of cleaning plastic from the Great Lakes is over \$468 million. It's that much.

The Government of Canada has done studies that have shown that the cleaning of plastics and everything after the fact is costing over \$7.8 billion in landfills and other areas. This is a very costly endeavour. We need to get ahead of this. How we get ahead of waste is by doing two different things. We need to take preventive and corrective measures.

Preventive measures promote green packaging. Some 60% to 70% of the waste that is created comes from packaging, whether it's industrial packaging or consumer packaging. We have gone overboard, above and beyond.

We need to help companies with a methodology to analyze the chemical composition of what they are putting in their packaging, because there is a lot of greenwashing going on of the physical properties. Subsidies should be provided for green packaging development.

On the other hand, corrective measures are needed to develop ways to handle the end use, as we do with water. Some 50 to 100 years ago, there were no municipal systems, but now, water is no longer an issue. We have to look at technology similar to that.

● (1120)

I thank you for giving us this opportunity. I look forward to our further discussions.

The Chair: Thank you very much.

We will now go to GreenCentre Canada.

Ms. Manuel and Mr. Pasternak, you have five minutes.

Ms. Lynne Manuel (Executive Director, GreenCentre Canada): Good morning, Madam Chair, ladies and gentlemen.

We are pleased to appear before you on behalf of GreenCentre Canada. We're grateful for the opportunity to provide our perspectives on economic recovery for the clean-tech sector. We've had the pleasure of meeting several committee members. For those unfamiliar with GreenCentre, we're a unique, not-for-profit organization that provides specialized technical and commercial services to companies developing sustainable chemistry-based technologies.

GreenCentre's past clean-tech projects have benefited a range of Canadian industries, from forestry and agriculture to energy, automotive, consumer products and resource recovery.

GreenCentre is here to request the creation of a program directed specifically at the needs of early-stage clean-tech companies. Our experience proves that a single lab-scale validation project valued at \$100,000 can unlock public and private investment of \$1 million or more to finance the more costly stages of scale-up and demonstration. A program that funds such projects has the potential to maximize short-term impact and accelerate economic recovery with the added benefit of reducing long-term dependency on government grants and subsidies.

Established companies and innovators with proven technologies are eligible for generous support from FedDev, SDTC, SIF and the net zero accelerator. Private sector investors also provide financial support to scale up and commercialize new technologies after and only after they've been substantiated.

We're concerned that government programs overlook early-stage clean-tech companies needing assistance to reach the point where blended financing is possible. These companies are an important part of the pipeline for both federal programs and private investors, but they face significant barriers to accessing the talent and resources needed to help them qualify.

Earlier this year we discussed this gap with 28 MPs, parliamentary secretaries, committee members, ministry staff and a senator, who expressed unanimous support for our concept. We were pleased to see a recommendation supporting GreenCentre's initiative included in the report from the Standing Committee on Finance released in February.

COVID-19 has disproportionately affected early-stage clean-tech companies. Unlike larger businesses, they operate on a narrow margin of survival. They face delays due to facility closures and occupancy limits, being forced to shift cash earmarked for technology development to cover operating expenses. Hiring has been frozen. Personnel have been laid off. Discussions with partners, investors and customers have slowed or stopped altogether and are only now beginning to resume.

Further, many clean-tech companies are led by young entrepreneurs and recent graduates. They are energetic and resilient but they struggle to finance the validation of their technologies even without the challenges of the past year.

Young Canadians must be at the heart of our recovery not only to help them rebound today, but also to ensure their future success.

GreenCentre has an established track record of invigorating Canada's clean-tech ecosystem. Since 2014, we've leveraged government funding to assist over 100 Canadian start-ups and SMEs which have raised over \$250 million and created hundreds of jobs. The impact is irrefutable. These companies have industrial partners and investors. Some have domestic and export sales. Others have support from SDTC and are well on their way to commercial operation.

Li-Cycle, a previous GreenCentre program participant, has made the global clean tech 100 list for two years and has commercial operations in Ontario and New York as well as a project planned in Arizona. They are only getting started.

The federal budget proposes to make \$1 billion available over five years to attract private sector investment in large-scale clean-tech projects. A mechanism is needed to advance innovative companies to the point where they actually qualify for these programs. GreenCentre has demonstrated the expertise, resources and reach to accomplish this. A GreenCentre program of \$50 million over five years would accelerate up to 150 early-stage clean-tech companies to the point where blended financing could work.

The future health of Canada's clean-tech sector depends upon the success of the innovators developing new products today. Accelerating the time to market is critical not only for their survival, but also to ensure Canada's success in meeting ambitious climate goals and becoming a leading global supplier of sustainable products and processes.

To become a clean-tech leader, Canada must do more to bridge the gap between the research and commercialization. Early-stage clean-tech companies now more than ever need access to expertise and resources to aid in their recovery. A program that meets these needs will attract private sector investment and help fuel the growth of Canadian companies, create jobs for highly skilled workers and bring sustainable environmental benefits to the world.

Madam Chair, ladies and gentlemen, thank you for your attention. We look forward to your questions.

- (1125)

The Chair: Thank you very much.

We will now go to Dr. Heather Exner-Pirot.

You have the floor for five minutes.

Dr. Heather Exner-Pirot (Fellow, Macdonald-Laurier Institute, As an Individual): Good morning. Thanks for the opportunity to speak with you today as you study our nation's economic recovery from COVID-19.

My name is Heather Exner-Pirot and I'm here in my capacity as a fellow at the Macdonald-Laurier Institute. I have been studying northern and indigenous development for 15 years and lately have been working on a variety of pieces related to indigenous engagement in resource development.

I can certainly appreciate the desire and the imperative to move toward a greener economy, but I want to caution the government against limiting through your policies what kinds of energy systems northern and indigenous communities can engage in and what kinds of resources they can invest in. I do have some concerns that our policy choices are limiting the opportunities that indigenous peoples have access to. I will offer two examples.

The first is the Canada Infrastructure Bank. As you know, it has a fairly limited mandate. I think it's excellent that you have dedicated \$1 billion for initiatives for indigenous communities. However, on the resource development side, it is restricted to clean power and green infrastructure. This is a concern because, by far, the best economic development opportunities for indigenous peoples in Canada have been in oil and gas and mining.

Indigenous businesses are 40 times more likely than the average Canadian business to operate in the extractive sector. Billions of dollars of contracts are awarded each year to indigenous businesses in the extractive industry. The oil and gas and mining sectors represent eight of the top 10 highest paying occupations for indigenous peoples in Canada, and oil and gas occupations pay indigenous employees about four times the average wage of all other sectors. That is consistent for indigenous women also, for whom oil and gas related occupations represent the top six highest paying occupations, with pipeline transportation being the highest.

I know there have been missed opportunities where first nations would have been able to become involved in projects as equity owners if they'd had better access to capital. These kinds of projects help them develop intergenerational wealth. I know there are many excellent indigenous solar, wind and biomass projects, but they do not generate the same scale of financial benefits as oil and gas and mining do in Canada.

The other example is in local energy development. I think community, indigenous and government stakeholders are all unanimous in wanting to transition remote communities off of diesel, but programs such as Northern REACHE, again, limit alternatives to solar, wind, biomass and hydro, and not fossil fuels such as natural gas.

In many cases, especially where hydro is not a viable option, switching from diesel to natural gas would save significant amounts of money, produce fewer greenhouse gas, particulate and nitrogen oxide air emissions, and would be quieter and more efficient to operate. In general, diesel generators can be converted to operate on natural gas fuels. Wind and solar are intermittent sources of energy and not stand-alone solutions for northern communities, but many government programs preclude that transition to natural gas because it is a fossil fuel.

My point here is to draw the committee's attention to some of the perhaps unintended consequences of green policies. It is good to incentivize and support communities that choose wind, solar, geothermal, biomass and hydro opportunities, but it should not constrain their ability to choose the best opportunity overall looking at a combination of social, economic and environmental factors.

I will conclude with this. The commodity cycle is turning. It looks like there are some good years ahead for oil and gas and mineral projects if Canada can start to attract more investment. It will be critical for economic recovery from COVID, especially in rural and remote areas.

Indigenous peoples have been historically left out of the benefits of Canada's resource development. Only in the past three or four years have we really seen that evolution toward indigenous equity ownership in major projects and that is a very positive move. But, if they are only supported in the ownership of smaller green projects, they will again miss out on a generational opportunity to build community prosperity and generate own-source revenues. I am concerned that this is neither ethical nor fair, so I would urge the committee to advocate for policies that maximize indigenous peoples' ability to make their own choices about what kinds of energy and resource projects to support.

Thank you.

• (1130)

The Chair: Thank you very much.

We will now go to Monsieur La Salle.

[*Translation*]

Mr. La Salle, you have the floor for five minutes.

Mr. Benoit La Salle (Executive Chairman of the Board, SRG Mining Inc.): Thank you, Madam Chair.

My thanks to all committee members for inviting me to appear.

I'm going to take a very practical approach to the recovery from the COVID-19 pandemic. We've seen what Mr. Biden has proposed and we're seeing what Europe is proposing. Never in our history have we seen so many billions of dollars being spent on green economic recovery, and it all depends on critical minerals. We see what the Americans and the Chinese are doing. I feel that, in Canada, we don't fully understand the situation.

I've been a mining operator and mine owner around the world for 25 years. I am in the process of trying to buy a lithium mine in Quebec. People don't realize today that the green economic recovery depends on critical minerals. We hear a lot of talk about Lion Electric, which is going to open a bus factory in Quebec. That's very exciting. Tesla is also opening factories in the automotive sector around the world.

However, did you know that today in the mining sector, 0% of graphite is made in Europe or the United States and 56% of graphite is made in China?

Every battery has two components, the anode and the cathode. Anodes are 100% produced in China right now, and 82% of cathode production takes place in China. If the Chinese stopped exporting anodes today, Tesla would close its factories around the world. The anode is graphite. So we need to have control over our natural resources.

I own nickel, copper, cobalt and graphite mines, and I am trying to buy a lithium mine. Do you know who our customers are? They are all Chinese. Now China has made it clear that they don't want to export raw materials anymore, not even anodes and cathodes, and they want to sell us cars or batteries instead.

The green industrial revolution hinges on the battery in the solar energy sector. When you have good sunlight, solar panels and solar power plants are cheaper than hydroelectricity and all the other energy sources. That is all about batteries. So everything related to batteries is very important. I'll take this opportunity to tell you that intellectual property and critical minerals need to be managed very tightly and not openly.

Next week, a huge lithium deal is going to be announced. Who is the buyer? It's a Chinese company. In Quebec, there have been two transactions in the last few years: the one involving Nemaska Lithium, in the lithium industry, and the one involving Nouveau Monde Graphite, in the graphite industry. Who are the owners? Europeans.

It's like vaccines: when we really need them, you're going to see that we won't have them anymore. That's what is going to happen. Two hundred and forty battery plants are being built in the world right now. Canada has none. That's incredible. In 10 years, 70% of the battery plants will be in China, 12% will be in Europe, 8% will be in the U.S. and elsewhere in the world, and we will have nothing.

We can't let our critical minerals go. In fact, the Government of Canada has put together a very good document on the subject. It says clearly that ownership of critical minerals is very important, because otherwise we are going to be in a situation of total dependence, much like we would have been with oil. Our situation today is actually similar to the one in 1908 or 1910, when oil was becoming the primary resource in the world. Energy storage is the new oil. Everyone says so, including the Goldman Sachs Group. We need to manage this. It's very important.

We have very few mines. A mine like the one I'm trying to buy in Quebec is going to produce 25,000 tons of lithium a year. A single battery plant needs 25,000 tons of lithium, 19,000 tons of nickel, 33,000 tons of graphite and 6,000 tons of cobalt, and 240 plants are being built around the world.

So as you can see, it's inconceivable that we would let our natural resources go, if we want to avoid being 100% dependent on other countries for our "oil 2.0", or energy storage. The Government of Canada must act quickly on this, because we have let some projects go in Quebec and, in my opinion, that's unacceptable.

• (1135)

Thank you for your attention.

The Chair: Thank you very much.

[*English*]

We will now start our round of questions.

Before we begin, I'm just going to remind witnesses. I know we have a tendency to move the microphone down when we take a cup of coffee, but when it's your time to speak, please put your microphone back up between your nose and your lip.

With that, we will start with our first round of questions.

We'll go to MP Dreeshen.

You have the floor for six minutes.

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

It was indeed a pleasure to hear from Dr. Exner-Pirot and Mr. La Salle. These are some of the things that I have been trying to say for years. We have to understand that if we're not paying attention to these sectors of our society, then we are losing out in so many different ways.

We are talking today about opportunities and barriers. I first want to talk to Mr. Nighbor from the Forest Products Association of Canada. The U.S.-based Natural Resources Defense Council has continuously campaigned against your industry. As a matter of fact, and you mentioned this, the NRDC recently sponsored legislation in the California and New York legislatures to get those states to stop sourcing from the boreal forests in Canada, Sweden and Finland. Ironically, these are three of the world's leaders in sustainable forest management, human and labour rights, and providing well-paying, family-supporting jobs in forestry, especially here in Canada for our first nations people.

This parallels the foreign-funded organization's misinformation campaigns that have attacked our energy sector, one of the world's

leading and most environmentally friendly oil and gas providers, which, like your industry, hires so many first nations people.

I would first like to ask how we can best counter these attacks. We have them within our own nation as well. What do you think would be the impact of the NRDC's action on the sustainability of the world's forest products sector?

Mr. Derek Nighbor: Thanks for the question.

Let me talk about just how we work. Our work is based on local community input and is science-based. We are over 90% on public lands under the purview of provincial governments. When I talk about environmental groups or activists, I'm very careful because I think we should all be activists—

Mr. Earl Dreeshen: Absolutely.

Mr. Derek Nighbor: —in all aspects of our lives. We don't always agree with groups like WWF Canada, the Nature Conservancy of Canada and Ducks Unlimited Canada, but we work with them. The difference between those groups and NRDC is that those groups invest in Canada. They have Canadian offices. They're doing work on the ground in wetlands and grasslands and in the boreal. NRDC is not. It's a fundraising machine and—

Mr. Earl Dreeshen: Thank you very much.

Mr. Derek Nighbor: I might just quickly say that the two bills, in Albany, New York, and in Sacramento, are almost identical. In our conversations with the Democratic legislators who sponsored them, they needed to bring NRDC in to brief us on what the bills were about.

Mr. Earl Dreeshen: Thank you very much. I appreciate that. I need to move on, but thank you for that.

This is one of the key things that I have asked all along, especially with our mining industry, the many great indigenous people who are working there and the companies that are simply looking for opportunities. If we allow groups to come in and do to our forestry industry or our oil and gas industry what they have done in the past, what makes us think they're not going to do exactly the same thing to our mining industry?

We're talking about the opportunities that we have. I can just imagine. Where there are investments in other places in the world, those same groups are going to be pushing against us as well. We've seen that already. Try to get a pipeline across this country.

Mr. La Salle, could you comment on that, please?

• (1140)

Mr. Benoit La Salle: You're absolutely right. This is why the new mining 2.0 is extremely inclusive. I've built mines in Africa; we've built mines all over the world, and now the social licence is very important. Though miners had a bad reputation for many years, we've changed considerably. The Canadian government is there with us, and all over the world, to make sure that we follow all the guidelines, and we do.

You're right, but I think it can be a win-win situation. I have a mining company in Africa. We have 5,000 employees working for us and we have about one million people benefiting from those mines with programs. You're absolutely right. To have a win-win situation in Canada, we need to do the same thing with the local population. We need that.

You don't get that if you sell to other nations that don't have the same values. Canadian miners have the best values around the world. I am one of them, I've mined all over the world and we have the best values. We should just do exactly the same thing in Canada.

Mr. Earl Dreeshen: I agree. I would submit that we also have that in our oil and gas industry. I challenge anybody who ever wants to complain about our oil and gas industry, especially Fort McMurray, to go up there and take a look at what reclamation is all about. It's not like dumping sewage into the St. Lawrence.

In the little bit of time that I have left, Dr. Exner-Pirot, you talked about government policies and capital fleeing with opportunities for our indigenous people to get working. I'm wondering if you could quickly comment on that.

Dr. Heather Exner-Pirot: I'll be very brief. I see the time's almost up.

In our country, I think we saw in the Financial Post, we have lost \$150 billion in energy projects in the past few years. On average, in the oil and gas industry, they're procuring 7% of their goods from indigenous suppliers. If you do the math, 7% of \$150 billion is a ton of opportunity lost for indigenous communities. I would hope that we can turn that around and start to build that wealth in those communities.

Mr. Earl Dreeshen: Thank you very much.

The Chair: Thank you so much.

We'll now go to MP Jaczek.

You have the floor for six minutes.

Ms. Helena Jaczek (Markham—Stouffville, Lib.): Thank you very much, Madam Chair.

Thank you to all our witnesses. You've brought an absolute wealth of expertise to your testimony today.

I would like to start with Ms. Bak.

Ms. Bak, in my riding of Markham—Stouffville there are so many small and medium-sized enterprises that want to do their bit in terms of reducing their carbon footprints. We heard earlier this week from Green Economy Canada that they're finding it particularly difficult to navigate the various opportunities, and as a non-profit, it is assisting those small and medium-sized enterprises.

You made reference to something in the EU where, as part of a project application, as I understood you to say, larger companies need to engage with SMEs as they put their projects forward. Could you expand on how that's working in the EU so that we might have some lessons here for us?

Ms. Céline Bak: The EU has a very concerted strategy to enable SMEs to become a more significant part of its economy. It's not a surprise, therefore, that when the EU decides to deploy over \$700 billion in capital over three years, it includes a requirement for all public stimulus of private sector investment.... It requires large project proponents to include SMEs in their project proposals.

This is part of a multipronged strategy. I can tell you, for example, that there is an EU program under way in Canada that is enabling EU scale-ups to understand how to export to Canada. There are people at the EU delegation who have a responsibility now, a project under way, where they are enabling EU SMEs to meet with large Canadian companies—Maple Leaf Foods is an example—to solve their problems with new innovations coming from the EU. The committee might find it interesting to consider this very systematic approach.

I have, in the past, requested reports from Statistics Canada on exports from Canada by SMEs, and those reports are no longer annual. We don't know the relevance of SMEs to Canada's exports. At one point, it was 25% of the value of all exports—so, equal to that of the mining industry. They're very, very significant to Canada's economy. However, we don't know what it is now because we no longer keep track of it.

• (1145)

Ms. Helena Jaczek: Your recommendation, obviously, would be that we should be keeping track of that kind of information.

Ms. Céline Bak: This committee could request it and require a report, yes.

Ms. Helena Jaczek: Thank you so much.

Ms. Sajedi, you ran out of time, and we were getting to some really interesting areas that you were talking about in terms of plastic waste and, obviously, the minimization of such waste. You were able to address some of the preventive strategies, but you also wanted to talk about corrective activities.

Could you perhaps expand on that area?

Ms. Sarah Sajedi: Thank you so much for looping me back in. I highly appreciate that.

Corrective measures are governmental intervention and help to create a sustainable, systematic process of recovery and reuse for recycling waste. We have done that in municipal water treatment and it has been extremely successful, but for some reason, for waste management it seems that it is very sporadic and there is no hard level like the rules and regulations that water has.

We have a really good method that we can follow because waste-water treatment and sewer systems have been extremely successful in cleaning our waters and making sure that our water quality is good. There have been many hundreds of chemists and environmentalists on this. Many methods have been developed to treat waste and reuse it, but it is not organized, and it's not government mandated. I believe that the government's mandating of this will help to organize it and give it structure, which it needs in order for it not to be the way it is currently.

Finally, on reuse of the materials by end-users—such as asphalt, cement and roof shingles—by companies that use the raw materials that are not so clean, the level of treatment that you have to do in order to make the waste reusable for clothing or bottles is much different than it is when you have to use it in cement or asphalt. Given that, intervention and giving them some sort of incentives would make it easier.

Thank you so much for the time you've given me.

Ms. Helena Jaczek: We just have a few seconds left. As you know, of course, waste-water treatment is a municipal responsibility in Ontario, Canada. Are you suggesting that there be a greater role at the federal level?

Ms. Sarah Sajedi: Federal and municipal: I think the federal level has to come with the rules and the possibilities for how to approach it, but it eventually goes to the municipal level.

Ms. Helena Jaczek: Thank you.

The Chair: Thank you very much.

[*Translation*]

Mr. Lemire, you have the floor for six minutes.

Mr. Sébastien Lemire (Abitibi—Témiscamingue, BQ): Thank you, Madam Chair.

Mr. La Salle, thank you for making us aware of the importance of critical, or strategic, minerals and intellectual property. In fact, I would like us to continue with that topic, because ownership is going to include not only intellectual property, but also the deposits, the processors, and the entire supply chain.

Why do you feel that owning our strategic minerals is key?

• (1150)

Mr. Benoit La Salle: We need to grasp the opportunity. A huge shift is coming in the green industry.

Canada is a nickel producer. As you know, Sudbury was the largest nickel-producing area in the world and it was all sold to the Australians and the Brazilians. Now we're seeing a second boom and a shift to solar power, to 5G technology and to electric cars and buses. All those technologies will depend on critical metals. We must own them. Otherwise, we will not be part of the 2.0 economic revolution. First came the oil boom of 1910, and now we're seeing

the green oil boom of 2020. We can't let this opportunity pass us by, because the minerals belong to us. They are ours, and we need to keep them, not sell them.

Whether they are from Australia or from somewhere else, buyers have a strategy based on their needs, their economy, and what they are going to produce in their country. The only way to be involved and get in on this 2.0 boom of the green economy is to be an owner. Otherwise, it will not happen. We will end up selling minerals like they were trees, and we will see our resources processed in the same way: they will be made into boards in the U.S. and sold back to Canada. I don't want to say that is what's happening, and I certainly don't want to speak for my colleagues in the forestry sector.

However, nowadays you cannot sell lithium, nickel or cobalt, have it processed somewhere else and buy it back. That makes no sense anymore, especially since the best minds are in Quebec. You know, the mining world is scouting for Quebec, Ontario and Canadian minds, because that's where the most qualified people are. Are we going to go work around the world and let others come into our home? That would make no sense. But that's what is happening right now. The Chinese, the Australians, the Brazilians and the Turks are buying up natural resources around the globe, and we're not reacting.

I'm pleased to have been invited to appear today to highlight this issue. A very big shift is happening. We need action from the government and the community. That action absolutely requires those who manage and control things to live here in Canada, not abroad.

Mr. Sébastien Lemire: We remember the infamous penny a ton price on the North Shore.

What advantage do Quebec and Canada have over the rest of the world in the strategic minerals sector? Can you tell us more about it?

Mr. Benoit La Salle: First of all, we have these minerals. That's better than the United States. The North American Lithium Mine, which is up for sale right now, has drawn interest from two U.S. groups, one of which is funded by U.S. defence. Why are they interested? The Americans need both lithium and graphite for weaponry, and they don't have any in their country.

Owning assets is important. We are lucky, we have the resources. We have them in Ontario and Quebec and in a few spots in the Maritimes. We have graphite and cobalt, among others. We have them, so let's keep them. We have what it takes to do the first two levels of processing and we're smart enough to do it. This is not the 1910s, this is the 2020s. We have universities, scientists and everything we need. They are going to be developed elsewhere. So why not develop them here? We just need to get support.

We're bidding today to acquire the lithium mine and we're competing with the Chinese, the Australians and the Americans. They're extremely aggressive when they come in to get resources. However, again, if we let it all go, we are going to be buying electric cars from China, and phones from Korea, and we'll have to find something else to do.

Mr. Sébastien Lemire: I am the member for Abitibi—Témiscamingue, where the mining sector represents a very big part of the region's economy. Can I hope that developing the mining of strategic minerals, such as lithium, will create jobs locally, especially in secondary and tertiary processing—that is the key sector—and leave the smallest possible carbon footprint?

Since sustainability is now part of the vocabulary in the mining industry, can we expect that in the lithium business?

Mr. Benoit La Salle: Absolutely. It's part of our vocabulary and our values. Everything will depend on the new owner. It will be a matter of setting out guidelines and saying what we want. The offer we've made for the lithium mine includes all stages of processing, right down to the product that will be used to make batteries.

People who come here should be absolutely required to do the processing on site and make anodes, cathodes, and battery components. One day, we may have a battery assembly plant, like Tesla, which has factories all over the world to assemble its batteries. Tesla doesn't make batteries, it assembles batteries to put in its cars.

We have to be in the supply chain, which is a very strategic sector, and we can't divest ourselves of our unprocessed natural resources for the next 100 years. That would be a real scandal. All electrification will happen in the next 100 years. Think solar panels, electric cars, electric trains and trucks. We have what it takes to be in that chain.

• (1155)

Mr. Sébastien Lemire: Thank you.

The Chair: Thank you very much.

[English]

Our next round of questions goes to MP Masse.

You have the floor for six minutes.

Mr. Brian Masse (Windsor West, NDP): Thank you, Madam Chair, and thank you to our witnesses today.

I'm going to the Forest Products Association and Mr. Nighbor.

When I first got elected, I accompanied Pierre Pettigrew, the then minister of industry, to Washington, D.C., back in 2002, on a specific lobby effort for softwood lumber. We had the embassy involved and had hundreds of different Canadian organizations and companies to promote it. We brought in lobbyist support to get the Congress and Senate to show up, and we worked the room and did all those different things.

Sadly, fast forward to today, and we still have a lot of the systemic issues with regard to our trade with the United States. I'm also even more worried with buy America and buy American—there are two elements there—and, potentially, further consequences. Can you give us some thoughts about that situation? It has been a real hard nut to crack.

Mr. Derek Nighbor: Yes, and thanks for that question.

That's also why it wasn't included as part of the new CUSMA. It's just really tough.

The issue we have in the States has become worse with greater consolidation.

There's a big difference. In Canada, like I said, over 90% of our operations are on public lands under the purview of provincial governments. In the U.S., it's 80% plus for private landowners. You have a very different kind of power structure, with "power" being the operative word there. It's a very powerful lobby in the U.S.

The other interesting thing is that they need our lumber.

First of all, Canadian lumber is better than southern lumber. It has properties that are better for building. It's stronger. It's more durable. It's more wanted.

Number two, even though the U.S. mills have built.... We're down 24 mills in the last few years. The U.S. is up 17 mills, mainly in the southeastern U.S., because of the demand in the U.S. Even at that, the States can satisfy only about 75% of domestic demand, so they need our lumber, but the powerful land lobby in the U.S. continues to be the biggest barrier there. It creates a political problem for both Democrats and Republicans.

I would say just quickly in closing that in terms of this high lumber price environment we're selling more than we ever did in Canada because of the high demand here. As for the U.S., there was a report out of KMOX in St. Louis, Missouri, that U.S. imports from the EU are up by about 13%, so they're turning to Europe now to fill their shortfall.

It's a real problem that goes across political lines in the U.S. We appreciate the governments and all parties standing with us and the work that has been done on the legal pursuit to make sure the right outcome arrives in the end.

Mr. Brian Masse: Further to that, the area I represent was logged in the 1700s and 1800s and now we have very little tree coverage, but that's a story for another day. We're trying to do better than what we did, but there's part of our heritage in that too.

There's something I wonder about. In the riding I represent, there's an automotive tool and die and mold-making industry which has reinvented itself. We've found that many of the patents and our value-added work was being shipped elsewhere and then sometimes even shipped back to us to be fixed.

I'm just wondering whether or not we're doing enough to look at our own domestic capacity. Instead of constantly fighting to try to penetrate to get it to the United States, can we do more domestically with an agenda to do more value-added production of our softwood lumber? You're right that it has properties that are much better than many of the U.S. products and it's also done in a better way, too.

Is there something more we can do here domestically? I just feel we're missing an opportunity.

Mr. Derek Nighbor: Yes. Let me start. We've retained 90% of our original forest cover in Canada. We have many sins for which atonement is due from before the 1970s and 1980s, and I think we've all heard those stories. The industry has come a long way and I'm really proud of the work being done on the ground.

I see value added as the place to go. When President Trump tried to stop that shipment of 3M masks at the border in early April last year, I remember getting a call from a couple of political offices in Ottawa. People were astonished. It was premium reinforced pulp from northern forests that was going into specialty paper that was being sent to the U.S. and then being sent back to us.

We have a scale problem in Canada for sure, but we are seeing opportunities to be better in that value-added part of the economy. That's part of the circular economy. It's turning waste into value and we have a huge opportunity in Canada to get value from every part of the tree that's harvested.

• (1200)

Mr. Brian Masse: I'm a New Democrat. I've been talking with some of my Democratic friends in the U.S. and I'm a little bit worried about some of the next level, potentially, of protectionism with regard to their next wave of assistance to companies out there.

Is there any advice that you can give to us? I'm vice-chair of the Canada-United States Inter-Parliamentary Group and we work in a bipartisan way with the Senate even, in fact, when we lobby. We'll be doing some more. In fact, I'll be attending the Border Trade Alliance meetings a week from now, too.

Do you have any advice on how we can help support the industry better? I just see it as a missed opportunity for both our countries. At any rate, I'll let you finish.

Mr. Derek Nighbor: I agree, and they need us. I think that's a question that deserves more than a 30-second answer.

I'll take that away, Mr. Masse, and I'll talk to my team and get back to you. I appreciate the offer of support. We've appreciated your support and your former colleague, Tracey Ramsey, was really great on this stuff as well, so thank you.

Mr. Brian Masse: Thank you very much. Please do so. We work in a bipartisan way and we keep pounding away on it, but the more we can do....

I see the flag, so thank you, Madam Chair.

The Chair: Thank you very much.

Mr. Nighbor, if you could send that information to the clerk, we'll make sure that all of the members of the committee receive it and in both official languages.

Thank you.

We will now start our second round of questions.

Our first five-minute round goes to Mr. G n reux.

[*Translation*]

Mr. Bernard G n reux (Montmagny—L'Islet—Kamouraska—Rivi re-du-Loup, CPC): Thank you, Madam Chair.

My thanks to all the witnesses for being here with us.

Mr. La Salle, I have at least 300 questions for you. I will try to keep it brief, and I'd like to have brief answers as well. Are critical minerals and rare earths the same thing?

Mr. Benoit La Salle: Critical minerals include rare earths and many other things. I refer you to a Natural Resources Canada document that lists critical minerals.

Mr. Bernard G n reux: Am I wrong when I say that Canada is divided into mineral claims for all the territories that could be developed one day, whether it is oil, gas, mines, and so on? Does it still work that way?

Mr. Benoit La Salle: That is still the way it works.

Mr. Bernard G n reux: If I understand correctly, you have a potential option on a lithium mine in Northern Quebec. You are considering acquiring it.

Is there anything that puts you at a disadvantage to foreign buyers, as we speak?

Mr. Benoit La Salle: No, absolutely not. It saddens me to know that we're considering offers from Australian or American buyers, when we have a Canadian group with international expertise and all the necessary financial means. It saddens me. For the same price and with, I believe, a higher level of expertise, we're even thinking that it might be worthwhile. The Americans say that they could perhaps sell it to Tesla, but that's just smoke and mirrors. Tesla doesn't make battery components, it assembles batteries.

Mr. Bernard G n reux: Is it the same for Lion Electric, a company in which the governments of Canada and Quebec have just invested some \$150 million each?

It doesn't make the batteries, but it does assemble them. Is that correct?

Mr. Benoit La Salle: That's right. The company assembles batteries using parts that come in from China, and then installs them in the trucks.

Mr. Bernard Généreux: Why aren't there more battery manufacturers or assemblers in Canada?

Mr. Benoit La Salle: It's simply because no attention has been paid to the industry in Canada yet, whereas every country in the world is focused on it.

Did you know that Volkswagen is going to have to buy 25% of the world's batteries by 2030? Canada won't even be in the running. We definitely need to get organized.

Mr. Bernard Généreux: I'm a businessman; I understand the difference between printing a document and doing what it says in the document, but I'm unfamiliar with this field. What is the difference between manufacturing and assembling?

What technology does it require? Do we have the technology in Canada?

Mr. Benoit La Salle: Right now, we need capital and entrepreneurs. Then we have to open a mine. As I always say, the real resource is the natural resource. When you have the ore, you can develop it at home.

You can't open an anode manufacturing plant if you don't have graphite. You have to mine the graphite first and then open an anode manufacturing plant. Then you have to open a cathode manufacturing plant, because we have nickel and cobalt.

You may not want to make batteries if there are no automobile manufacturers nearby. That's because batteries do not travel well, and you can't manufacture batteries far from the auto assembly plant. For example, you can't put a large quantity of batteries in a container, because they will form one huge battery that is likely to catch fire. So batteries don't travel well, and you need the assembly plant to be located very close to the auto assembly plant.

• (1205)

Mr. Bernard Généreux: We have auto assembly plants in Canada, especially in Ontario. I'm also thinking of Lion Electric in Quebec, which makes buses.

So what are the development opportunities with respect to the critical minerals and rare earths we have in Canada? Do we really have any power in that regard? You say they have none in the South, but we have them in the North. How much does Canada have; what items do we have in our inventory of critical minerals, so to speak?

Mr. Benoit La Salle: We have them, and that is important in itself. We have a lot of them. Quebec has a lot of lithium and graphite. Ontario and Newfoundland have nickel. We have critical minerals.

The demand is going to explode. Over the next 10 years, the demand for lithium will increase eleven-fold, while the demand for graphite will increase seven-fold. We have to be in the race. Our resources will be developed, I swear to you and I guarantee it. Will our resources be developed by us alone, or will they also be devel-

oped by the Chinese, the Australians or the Brazilians? We don't know, but one thing is certain: our resources are going to come out of the ground, and we're going to run out of them.

Mr. Bernard Généreux: Who owns the lithium mine now? Does it belong to Quebec?

Mr. Benoit La Salle: No, it belongs to Chinese owners who have decided to leave because operating the mine no longer meets their strategic and political objectives. They came in, they invested, and they decided to shut it down two years ago. All the employees were put out of work. They have been looking to resell the plant for almost two years, and the third round of bidding is under way.

I'm repeating myself, but I don't understand why the Canadian group isn't the preferred solution.

Mr. Bernard Généreux: Madam Chair, I haven't finished asking my 300 questions.

The Chair: You may have time to ask them in the next round, Mr. Généreux.

[English]

Our next round of questions goes to MP Jowhari for five minutes.

Mr. Majid Jowhari (Richmond Hill, Lib.): Thank you, Madam Chair.

Thank you to our witnesses for their very informative testimonies today.

I'd like to start with Madam Bak.

My understanding is that your organization published a report back in June 2020 titled "Building Back Better with a Bold Green Recovery". I looked at the report. Under the heading "Forward", it highlighted that Canada already has a competitive advantage in four areas: low-carbon natural resource commodities, zero-emissions vehicles, smart buildings, and sustainably produced food."

You also suggested a series of investments that the federal government can make to make sure that Canada is well set in this path of resilience.

Can you highlight some of the federal government ones and specifically talk about how these funds will be sourced?

Ms. Céline Bak: Thank you very much for the question.

The build back better plan tries to do two things. It tries to solve for carbon, so it actually puts Canada on a path that is consistent with the goal of reducing emissions by 45% by 2030, but it also tries to stimulate the economy. The plan, in its summary, includes recommendations along 11 axes.

To build on the discussion we just had a moment ago about rare earth, I think it would be helpful perhaps to speak about natural resources and EV innovation. The proposal that we make in the build back better plan is a \$40-billion investment which would create a million jobs and a gross value added to the economy of about \$300 billion, with an economic multiplier of two.

This proposal would take Canada's oil resources into a new realm, which would be bitumen beyond combustion. It would use organizations like GreenCentre Canada and others like Alberta Innovates to create high-value materials that are extremely light and are fundamentally important to the electric vehicle value chain.

If Canada doesn't have a strategy for its lithium and for advanced material like graphite, it's not for lack of examples in other countries. In a relatively small, poor province, Spain has a small lithium mine which was just going to be a mine. They decided to build a battery plant next to it. With advanced materials that can be produced with Canada's oil sands to create materials that are extremely valuable and that create intellectual property that can stay in Canada as part of an electric vehicle value chain, I think this, combined, is a winning proposal for Canada.

There are other areas that are perhaps less technology intensive, like building better homes and workplaces. The government did take up one of those recommendations with interest-free loans to be provided and managed by CMHC. We think there's a lot more to be done there as far as decarbonization of the whole construction supply and value chain is concerned. Again, we're seeing very strong moves in other jurisdictions to create standards to reduce emissions in the building supply value chain as well as to move towards passive houses.

The irony in the world of building is that Canada was the world leader in terms of energy efficiency for buildings and homes. The world doesn't associate Canada with the passive house. It's Germany that is seen as the originator of that, but it did come from Canada.

• (1210)

Mr. Gary Vegh (Senior Environmental Toxicologist and Co-Chief Executive Officer, ERA Environmental Management Solutions): Perhaps I could add something to this.

Our company has worked very closely in the auto sector. Right now this sector is undergoing the biggest change to electrification since the Industrial Revolution. We're also part of the Responsible Battery Coalition, looking at what we're going to do with the batteries of the EVs.

I think all this conversation about EVs and the batteries, the mines, the minerals is very important, because this is actually happening. I think for the gentlemen in Quebec, Sébastien and Bernard, I'm really surprised that Quebec is not doing more in this sector, because we are in a very good position, and it's an industry that is growing, not just the automotive but also the energy storage sector.

The Chair: Thank you very much, Mr. Vegh. You have good timing.

[Translation]

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

Mr. Sébastien Lemire: Thank you, Madam Chair.

Mr. La Salle, I would like to learn more about the supply chain.

Let's take the example of a company like Lion Electric. We know very well that they need products like lithium, a valuable strategic

mineral. If China owns the lithium mine, it will inevitably be much more expensive to supply. What does that mean for our industry?

Your consortium probably already has clients and agreements. Which Quebec and Canadian companies are involved in your efforts?

Mr. Benoit La Salle: You are absolutely right.

The difficulty is that the company that will mine this will be able to find ten buyers for their product. We, for example, have one of the largest graphite mines in the world, which is in Africa. Six customers buy all the production from us, and they are Chinese. Twenty other customers are waiting for production to become available, and we are being asked to increase our production.

The future owner of the mine, whether they are Chinese or Australians, will have their clients in their country. Since we don't have anode and cathode manufacturers in this country, they could invest the \$200 million needed to start lithium hydroxide production and sell the products at home, in China or Korea. The sale could be done under 10- or 5-year contracts.

That's the reality, and I always say it's because of that reality that the mine owner has to be Canadian. We need, for example, Lion Electric to be able to call Benoit La Salle and ask him if he can increase his capacity to provide the 10,000 tons he needs next year or two years from now. We need to be able to talk to each other and welcome the people who come to us in Abitibi. That is the power of being together.

If we were to go to Hong Kong or Beijing for supplies, we would find that these cities are chronically short of resources. If we wanted to, we could sell everything to China right away. We could sell them our graphite, nickel and cobalt mines. They buy everything at a high price. If we refuse to sell them the mines, it means we refuse their offers.

In two weeks, China will close a nearly \$1-billion deal with South America. It will buy a lithium mine from it. Why? All that ore is going to go out of South America and into China.

What Mr. Vegh was saying is absolutely true. We need to work on making anodes and cathodes. We need to work on producing components so that when Lion Electric says they have significant demands for their chips, we don't have to ask China to meet their needs. The reality...

• (1215)

The Chair: I apologize, Mr. La Salle, we are out of time. Perhaps you can continue your response in an upcoming round of questions.

[English]

We'll now go to MP Masse.

You have two and a half minutes.

Mr. Brian Masse: Thank you, Madam Chair.

I will ask Mr. La Salle a question.

With regard to the perspective of what's going on in the United States, Ford just announced another investment into battery manufacturing in the Detroit region last week. Missing again was Canada in terms of investment.

What's your take on the fact that the U.S. is moving towards battery plant expansion and development, including the traditionals, including General Motors and Ford? We haven't seen FCA, Fiat Chrysler, yet, but they might be next.

Mr. Benoit La Salle: You're absolutely right. They have stated that publicly, that they're now looking to Canada to supply the critical materials. They are opening up all these battery plants. There will be about 20 of them. There are currently 20 battery plants in construction in the United States and they don't even know where the actual input is going to come from. On the mine we're bidding for, there are two Americans that are completely backed by the U.S. Department of Defense or by the federal government to come and buy the lithium from this project.

When we see all these announcements and we think it's great, and Mr. Biden and all the billions of dollars, because they're all going electric, they're turning back to us.

We don't have a problem. We don't have a battery plant here in Canada, but at least let's sell them finished products.

We mine lithium. We turn that into spodumene. We sell it at \$600 a tonne. We turn that into lithium hydroxide, which is \$14,000 a tonne. Do you see the difference?

The foreigners who are trying to buy the mine are not going to do the hydroxide here. They'll do it in North Carolina, in Australia, in China, whereas we're saying, no, we're building the hydroxide line in the plant immediately and we'll sell that.

Right now, hydroxide is \$14,000 a tonne and people think it will go to \$30,000. Spodumene will go from \$600 to \$800.

Mr. Brian Masse: Thank you, Madam Chair.

The Chair: Thank you very much.

We'll now go to MP Baldinelli.

You have five minutes.

Mr. Tony Baldinelli (Niagara Falls, CPC): Thank you, Madam Chair.

Thank you to all the witnesses for joining us today.

I just want to build on some of the comments and questioning of one of my colleagues earlier with regard to the support required for assistance for small and medium-sized enterprises. I'll refer back to our last session when we had two organizations saying that sometimes those small and medium-sized enterprises have a difficult time accessing not only the resources available for assistance but also the technological assistance and support they would need to bring forward the changes that are required.

I'll go first to Ms. Manuel with GreenCentre Canada.

You talked about the commitment from the federal government of that \$1 billion over five years to attract private sector investment in clean-tech projects. If you could, build on those obstacles that stand in the way of those small and medium-sized enterprises that try to leverage, develop and grow from the assistance that could be provided.

• (1220)

Ms. Lynne Manuel: The companies that we work with are very nascent, very young. They are start-ups and entrepreneurs. Many of them come from an academic background. They are trying to commercialize technologies that were developed by universities. Very often they have a great idea and they have enough to put some initial patents together and do a little bit of work, but at that point they're a bit stymied.

In clean tech there is often the need to do quite a bit of technical work that requires laboratories, people with expertise and analytical equipment. All of this is very expensive. People working one-off alone by themselves also aren't nearly as productive as people working in groups, so at GreenCentre Canada we provide that expertise. It's very much faster for the companies that are accessing it than trying to pull all these things together. They don't have the money. They also don't have the experience. They're focused on trying to run their businesses. We tend to help them figure out what it is they need in order to get over the hump so their technology becomes investable. That's what we do.

We have over 100 years of person experience in our lab, so it really makes a big difference when you apply that kind of knowledge to these problems.

Mr. Tony Baldinelli: Is there a gap, in a sense, in those small and medium-sized enterprises knowing that your services and others like ERA exist out there to assist? When those small businesses need help, how can they find it?

Ms. Lynne Manuel: You're right. That can be a gap. At times we've run several programs. We're quite well networked across Canada because we run some NRC IRAP-sponsored programs, so we get in touch with a lot of different companies. With the IRAP program, it's SMEs that are more at the revenue-generating end of things. We've worked with a lot of start-ups through several programs that we've had in the past few years.

Our most recent program ended in March 2020, just 13 months ago. We canvassed all across Canada very quickly to find seven projects in that year. We completed those projects. Those companies have since gone on to raise \$45 million and hire 60 people in Canada.

If we can put the word out that these programs are available, there's very good uptake. Certainly, creating more of a national ecosystem and network with regional offices set up to really look in the various regions to find the best opportunities would be even better.

Mr. Tony Baldinelli: Thank you so much.

I quickly want to follow up with ERA Environmental Management Solutions..

Gary, you spoke earlier about the impact on the automotive sector and I was hoping you could follow up a little bit more. I also come from a riding like Mr. Masse's. We have a General Motors plant just next to my riding. In fact, I spent four summers there. They put me through university working there.

As we transition to a greener economy—they're an engine plant facility—what are those impacts? What are those decisions? What are those things that GM is going to be looking at as it moves forward to newer technologies and means in engine production?

Mr. Gary Vegh: The drivetrain, as you can imagine, is changing with electrification, so the battery plant is a good part of the discussion. The efficiency of the plants themselves—how they manufacture and release to air, water and the land—are huge investments. Any plant is worth over \$1 billion U.S. We're seeing it ourselves.

I think I mentioned FCA, which is now Stellantis, and a brand new plant in downtown Detroit. We do see investments there in Oakville, Ontario, with Ford, not just on the consumer side—regular vehicles—but also on the commercial side with trucks. We hear contracts with Amazon and their companies are happening. Even Hydro-Québec is advertising here in the province of Quebec about transportation of homegrown produce through the winter with electric vehicles, so that's also slowly taking shape.

The Chair: Thank you very much, Mr. Vegh.

Unfortunately, Mr. Baldinelli, that's your time.

We'll now go Ms. Lambropoulos for five minutes.

Ms. Emmanuella Lambropoulos (Saint-Laurent, Lib.): Thank you, Madam Chair.

When I first proposed this study on the green recovery several months ago, I was really looking forward to helping our government find a way forward, and to hear from as many witnesses and experts as possible in order to make sure we did things in a responsible way, but that we got the job done.

Obviously, we're looking at a moment in history where we have a unique opportunity to build back better, because of a pandemic. It's an opportunity we don't necessarily have presented to us all the time.

Today we heard many of our witnesses express some concerns, and express some of the consequences we can face if we go about this the wrong way. Obviously, we want to get to net zero emissions within the next decade or two. However, I'm hearing that our natural resources sector could definitely suffer if we were to go about this the wrong way. We don't want to be dependent on any other countries in the future, so we need to come up with a plan. We need to really measure and make sure we do this the right way.

What are the things we should be taking into account when creating a green recovery plan? How would we assess that this is the right way to go?

• (1225)

[Translation]

Mr. La Salle, you talked about the natural resources that we have here in Canada, and you said that foreign companies are buying up our resources and using them.

Given that the goal of the Government of Canada is to become greener in the future, what would you recommend to them in that regard?

[English]

Transportation is a huge reason for a lot of the air pollution we have. If we hope to get to a place where we only use electric vehicles, how do we leverage this? How do we take our natural resources into account to make sure we have a sustainable path forward?

[Translation]

Mr. Benoit La Salle: Thank you. That's a very good question.

We saw this in the 1990s. The government wanted to set up an industrial strategy for aeronautics. We were not yet a major player in that sector, but the government had decided to set up such a strategy so that we would become one.

There are people here who are much more qualified than I am to talk about industrial strategies in terms of integration, but we have the raw materials. If we didn't have them, we could just watch the train go by and hope that it doesn't cost too much at the end of the day, much like we do with COVID-19 vaccines. We're looking at the situation and hoping to get vaccines.

However, in this case, we have the raw materials. We own them. We must not sell them. We need governments to put an industrial strategy in place, which is not that expensive. The difficulty lies with having the natural resource, and we have it. It is important that an industrial strategy be put in place so that primary and secondary processing can take place in this country. We need to solicit local people—we have intelligent people—to turn to the manufacture of anodes or cathodes. We need to move toward integration.

We have a great company, Lion Electric, that makes school buses and is going to take over the world market. Do you know that the ore travels 35,000 kilometres from Quebec to China and then back to Lion Electric? This is not economical and it is certainly not environmentally friendly. We have to stop this right now. We have the natural resources. The ore must stop travelling and we must have an industrial strategy. We also need financial support, whether in terms of capital or debt, through development banks like Export Development Canada. With a strategy like this, we'll develop our natural resources properly.

Ms. Emmanuella Lambropoulos: Thank you very much.

I don't have time for another question, but I would like to thank all the witnesses.

[*English*]

ERA, I'd like to specifically and particularly thank you for your presentation. You are actually in my riding of Saint-Laurent, so I appreciate your being here today. You offered a lot of really good information on plastics and waste.

The Chair: Thank you so much.

We'll now start our third round of questions, and the first round goes to MP Poilievre for five minutes.

[*Translation*]

Hon. Pierre Poilievre (Carleton, CPC): Thank you, Madam Chair.

Mr. La Salle, you mentioned minerals from China that are used to make electric cars. Yet China's environmental standards are lower than ours.

When you take into account all the environmental consequences of the activities associated with producing an electric car and those associated with producing a gasoline-powered car, how does the environmental cost associated with using an electric car and the cost associated with using a gasoline-powered car compare?

• (1230)

Mr. Benoit La Salle: That is a very good question.

Your question has two parts.

The first is the lack of respect for the environment in China. I will only talk about cars, I will not talk about the batteries that are used to store energy. European companies have set traceability criteria. That is why cobalt from the Democratic Republic of Congo and other countries is not acceptable. All German companies, including BMW, and French companies, have set traceability criteria. For us, this is an opportunity, because even if there are no battery manufacturers in Quebec or Canada, we can still export to Sweden. There is a very nice...

Hon. Pierre Poilievre: I apologize for interrupting you, but I don't have much time.

If you consider all aspects and activities surrounding the production and use of the gasoline car and the electric car, how do the environmental costs of these two cars compare? Which one offers the greater environmental benefit?

Mr. Benoit La Salle: Several studies on this topic show, among other things, that it depends on mileage. Previously, what put the electric car at a disadvantage was battery recycling. When you had to recycle the battery after 10 or 20 years, the environmental cost of an electric car became roughly equivalent to that of a gasoline car.

However, all car batteries will now be reconnected together in huge containers, and they will be converted into batteries for energy storage. This will make the electric car more environmentally competitive than the gasoline car.

There are a lot of studies on this and you are right that it is not that obvious.

Hon. Pierre Poilievre: Every time you see someone in an electric car, you think they are doing a lot for the environment. However, that's not necessarily the case when you consider all the materials and minerals used to make the car, which come from mines in China. I'm thinking in particular of coal, which is currently used for electricity generation.

When you take these factors into account, it's not clear that electric cars, right now, have a huge advantage over traditional cars. There's a big debate about that. Is this an accurate description?

Mr. Benoit La Salle: That description is very accurate.

Hon. Pierre Poilievre: Thank you very much.

[*English*]

I just think we have to be very careful about what seems to our eyes to be green versus what is actually green. I think in Ontario the government signed the so-called green energy contracts that overpaid for electricity through wind and solar power. This had the effect of actually driving more electric activity out of the economy and into more polluting jurisdictions where energy was cheaper.

Also, it made sure that things like geothermal to heat your home are less economical, because the electricity that you have to buy in order to power the geothermal system is far more expensive here in Ontario due to these so-called green energy contracts. It's also more expensive to power up your electric car in Ontario because of these so-called green energy contracts. When we could have just bought affordable electricity from Manitoba and Quebec, which is clean, green and proven, we instead wasted enormous sums on these contracts.

Things that appear green to our eyes are not always so green.

• (1235)

The Chair: Thank you very much, Mr. Poilievre, and I'll just tell you that I do enjoy my plug-in hybrid. I'll just mention that.

[*Translation*]

Hon. Pierre Poilievre: Congratulations.

[*English*]

The Chair: We will go now to MP Ehsassi.

You have the floor for five minutes.

Mr. Ali Ehsassi (Willowdale, Lib.): Thank you, Madam Chair.

Thank you to all the witnesses for their incredibly valuable testimony today.

I will start with Ms. Bak.

You obviously look at things from a global perspective, and you also touched in your testimony on the clean future act in the U.S. What are the lessons for us to learn from the framework that has been set up in the U.S.? Is there anything we can learn from the American approach?

Ms. Céline Bak: The clean future act is legislation that is making its way to the house floor, so it's obviously legislation that's still being considered. I thought the comments that I brought as a witness would be appreciated by all parties of this committee, in terms of the idea of a highly decentralized mandate for each federal agency to plan for its contribution to Canada's achieving its goal of reducing emissions by 45% by 2030.

I think this is the only way we're going to achieve what we need to achieve. I say that because I think traditionally in Canada, the ministry on which your committee is focused has not had a mandate to report on the progress of the industry. I'm afraid we can see that in the lack of industrial policy for electric vehicles. The fact that the U.S. is taking this structure, the highly decentralized approach, under which every agency has to come up with a plan and report to Congress in a way that is transparent, and such that citizens can review and see progress and consider the plan before it's finalized, I think is really relevant. This committee could request that of the minister with information on all of the industries that are within the purview of the ministry.

Mr. Ali Ehsassi: As you rightly point out, it's a very decentralized approach, and an integral part of the American framework, or the proposed framework, is the role of the states.

Is there anything to be learned there for Canadians in terms of what the provinces are supposed to be doing?

Ms. Céline Bak: Each province, as you know, under the carbon legislation of Canada has to show progress in terms of reducing emissions. I think there are areas in which the Government of Canada has an important role to play. In the build back better plan we pointed one of those out, which is interprovincial transmission. It's fundamental to have really strong interprovincial transmission to attract massive private sector investment.

I follow very closely the Canadian and global oil and gas industry and I can tell you that capex in the oil and gas industry varies between \$5 billion and \$8 billion a year. It happens that the opportunity for renewable energy in Alberta is of that same order, 10 times over. If we had the strong transmission interprovincially, we would be able to attract world-class infrastructure investors for renewable energy in Alberta and Saskatchewan, as an example.

Mr. Ali Ehsassi: Thank you very much, Ms. Bak.

Now I would like to go to Mr. La Salle.

Mr. La Salle, you're obviously very passionate about critical minerals. In your view, is it imperative that we adopt a continental approach to critical minerals along with our southern neighbours or can we go it alone?

Mr. Benoit La Salle: I think we should have both. We should start alone by requesting transformation in Canada to start, but clearly we won't be able to do it alone. They have 20 plants in construction. We have none right now for battery manufacturing. We're so far behind. Somebody mentioned that Ford and GM are all going into electrical cars. Monsieur Poilievre was asking if it is really better if the trend that has started is accelerating. I think we should have both.

Your question is great because we can't do it all but we absolutely have to stop raw materials going south without transformation.

● (1240)

Mr. Ali Ehsassi: Thank you.

The Chair: Thank you very much.

[Translation]

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

Mr. Sébastien Lemire: Thank you, Madam Chair.

Mr. La Salle, what can the government do, and what can it not do, in context, to intervene?

I am thinking specifically of a strategy to protect strategic and critical minerals.

What are the levers that can be put in place?

Mr. Benoit La Salle: We absolutely must have a system. I'm an entrepreneur and we've always done business in a free market, but as someone said earlier, we're in a unique time that no one could ever have imagined. It's a time of profound transformation and we need the government to step in.

It's as if the California state water company came to British Columbia to make a deal to build a pipeline to get all the water from British Columbia to the south. Everyone would be up in arms. Yet it's the same principle. So we need to respond.

They're going to come and take all our resources, because the demand is so great. It's going to happen, but we have a vast territory and a huge amount of natural resources. We need the Canadian government to step in, because it's strategic, and I still don't see the provinces stepping in.

In my opinion, this is as critical as controlling drinking water. We managed to control oil in the west, and we in Quebec control hydroelectricity. If, tomorrow morning, the Goldman Sachs Group launched an initial public offering for Hydro-Québec, it would be a bit funny, wouldn't it? We would oppose it.

We need to put safeguards in place. I want the federal government to review critical minerals transactions and make sure that we have an integrated industrial strategy, but also that we have veto power over those transactions. The survival of our economy is at stake. We need to control the costs associated with our economy.

Mr. Sébastien Lemire: That's all well and good, but I'd like to know more about you.

The environmental issue is fundamental. What is your reputation on the environment and corporate social responsibility?

Mr. Benoit La Salle: I am a certified public accountant by training. In 1995, I created a company, which is called SEMAFO, when I was on a humanitarian trip to help children in Africa. It has grown into a huge company with thousands of employees.

As I said, we also have a foundation, the SEMAFO Foundation. We have helped millions of people, and we were even nominated for the Nobel Prize for corporate social responsibility, or CSR. I went to make a presentation in Sweden regarding this nomination.

So our reputation is real. We want to promote those same values in Abitibi with the lithium mine project.

Mr. Sébastien Lemire: Thank you very much, Mr. La Salle.

The Chair: Thank you very much.

[English]

We'll now go to MP Masse.

You have the floor for two and a half minutes.

Mr. Brian Masse: Thank you, Madam Chair.

I want to bring Dr. Exner-Pirot into the conversation.

We had presentations from the Toronto Community Benefits Network. It's something that I worked on in my area to get some additional supports for local areas geographically where we had traditionally overrepresentation of unemployment, poverty and lack of opportunity for federal projects. What they have proposed and what they're doing on a number of projects themselves is to include those components into contracts, similar to the United States, where there are percentages of allotment in a geographically looked-at area to reverse some of the historic lost opportunities.

I wonder what your thoughts are with regard to community benefits in federal programs for building back, especially when it comes to specific targeted areas where we know the representation is not equal to the opportunities.

Dr. Heather Exner-Pirot: I know we're talking about a green recovery, but we also need to talk about an inclusive recovery, and including those people you just mentioned.

The resource development sector has become much better at procuring from indigenous companies. It's not an easy thing to do. There's a lot of capacity building, a lot of relationships that have to be built. The federal government, as you probably know, has committed to 5% procurement and is very slow in getting to that stage. As we pour more federal funds and spend more federal dollars on infrastructure, it's going to be very important they work much more closely with indigenous small and medium-sized companies and communities to make sure they can access those opportunities and get to that 5% mark and beyond.

With regard to a lot of the other discussion, we're talking about how we're going to need new resources, we're going to need electrification, all these things. These are all projects that happen with natural resources on land. If we don't get it right with indigenous peoples, there will be delays, there will be problems, and they will also miss out on the opportunities.

As we recover, we need to be much smarter on including indigenous peoples meaningfully. I don't think we'll get very far in developing any of these resources if we don't do a better job.

• (1245)

Mr. Brian Masse: This will be really quick as I only have a couple of seconds.

If they miss the 5% target, is there an opportunity to bring forward the piece that was missed to another project, or is it just lost forever? Is there an obligation to fill the void that was missed from the 5%?

Dr. Heather Exner-Pirot: There's no obligation. I think it's a target, not an obligation. They just need to do more work, obviously, to get to that point.

Mr. Brian Masse: Thank you.

Thank you, Madam Chair.

The Chair: Thank you so much.

We will now go to MP Dreeshen.

You have the floor for five minutes.

Mr. Earl Dreeshen: Thanks once again, Madam Chair.

We've just finished a study on the red tape permit economy and the like. This is one of the questions I'd like to start off with. In Canada, it takes years to get projects approved, whereas in other places in the world, they certainly don't have to deal with that. We've seen this with Bill C-69 and the other issues associated with that. We've seen billions of dollars leave Canada because of the time it takes or projects perhaps not being allowed to get on the road here.

Mr. La Salle, can you give me a quick comparison of the time it takes to get through the red tape we have here in Canada? If we're going to come up with a solution, we have to look at that first and then take it from there.

Mr. Benoit La Salle: Thank you so much. This is my pet project.

I've worked in mining everywhere around the world. As an example, we're operating and building a bigger mine now in Morocco. The time from presenting the study to getting a full permit is six to nine months. We're following IFC standards and World Bank environmental standards. We do take care of the local population. Permitting takes less than one year. In Canada, it would be a minimum of four to five years.

This is why, of course, China is so much into Africa. The natural resources are there, and permitting...don't believe that permitting is being paid off. I've been there for 25 years and it's not the case. They're very strict. The embassies from all the European countries are there. They're checking all of that. We're following international norms, but they want and need mining or natural resource projects. You're absolutely right. I think the ratio is approximately one to five. If you were to look at the United States, it would probably be one to 10 because they are much more difficult.

I've been saying that to the Quebec government here because that's where I want to get involved. I said, "You've got to cut those years by at least 50%."

Mr. Earl Dreeshen: Yes, I think that's a critical part. A lot of folks think that by adding extra laws, bureaucracy and so on, that's going to just make it better, but quite frankly, that's because they haven't looked at what Canada actually does. I think it's time that we stop apologizing for being Canadians and recognize the great things that we do. I think that's part of it.

My other question is about the electric vehicles and so on that we keep hearing about. I'm interested in who we think should be paying for the municipal electricity system upgrades that are going to be required. An example would be if someone lives in a condo and there are 70 cars in the parking lot. How do we manage that and who is going to be responsible for it?

Mr. Benoit La Salle: Look, I'm the miner; I'm not the one taking care of the infrastructure.

I'm telling you, though, there is room. You could ask the automobile makers. Look at Tesla's profits last quarter, and it's just starting. There's room to have a tax, if there is a need for it, to subsidize all of this. It's going forward. It's going very fast, and that economic system has room to pay for infrastructure.

• (1250)

Mr. Earl Dreeshen: Maybe instead of giving Tesla owners the subsidies they now receive, we could start a little bit of a fund when this does happen. I'm just afraid that it's going to be people who don't own cars and so on who are going to be caught with the cost of the upgrade.

In the minute I have left, Dr. Exner-Pirot, I want to stress how critical it is that we look at the great industrial leadership we have in our indigenous community. You had talked about the requirements with regard to Bill C-69 and talking to our native population. Do you see ways that we could make this work better when we are trying to engage with the mining sector?

Dr. Heather Exner-Pirot: Absolutely. I think sometimes the federal government has a tendency to put up more barriers and to see indigenous peoples as people to be protected, rather than removing barriers so that they can interact with industry more directly. Bill C-69, and even Bill C-15, I think, are examples of that.

As for ways you can improve it, groups like the First Nations Major Project Coalition do an excellent job. If there's a bottleneck, it's because indigenous nations need to do their own due diligence. They want to get their own environmental monitoring. Supporting them to get through those due diligence processes will reap so many benefits, I think, in shortening timelines and approvals.

Mr. Earl Dreeshen: Thank you.

Mr. Gary Vegh: By the way, adding these charging stations is not that expensive. We added 16, and we're not a large company and don't have the money that Tesla has.

The Chair: Thank you so much.

We'll now go to MP Erskine-Smith.

You have the floor for five minutes.

Mr. Nathaniel Erskine-Smith (Beaches—East York, Lib.): Thanks, Chair.

I want to start with Lynne.

You have spoken about the gap in existing federal supports as it relates to early stage start-ups and the necessary research and development that needs to happen for those companies to succeed. There was a lot of money in the budget for a SIF renewal, and specifically a net zero accelerator, and there seems to be a continued and increased focus on clean tech going forward and on growing clean tech in Canada.

Walk me through how those proposed supports continue to miss early stage start-ups.

Ms. Lynne Manuel: Thank you for the question.

The issue is that those programs require industrial participation up front in terms of dollars. They require private investment before the programs can even begin.

The issue with this is there's so much technology that is created... We have a great research community in Canada, we really do, but in order to get to the stage where investors are willing to put out money—industry, private investment or even the federal government programs—companies are required to prove that they have something, that they have something investable.

It's a kind of catch-22. In order to get money, they have to show that they're investable, but they can't show they're investable because they don't have money to prove it. It's a really difficult situation.

What that tends to do is really elongate the time frame it takes for these new technologies to get to market, because they struggle to raise the money to get there, and some of them don't make it. Some of them leave and go to another jurisdiction. They go to a different country or—

Mr. Nathaniel Erskine-Smith: Should we be looking to say, then, in our recommendations, that some fraction of the proposed SIF funding and the renewal of SIF should be devoted to early stage start-ups?

Ms. Lynne Manuel: I've been talking about this for quite a while now, and I think that's really a necessary part of what the government needs to be supporting, and I will say that there's so much leverage on those dollars. We're talking about doing lab-scale work where people can take that data forward and convince other investors that they have a working technology.

Working at that scale is very economical for everyone concerned. We don't want people to reach that investable stage before they've done their homework, because it costs so much more to do the work at that point. I think it's really a good deal for everyone.

Mr. Nathaniel Erskine-Smith: I see a couple of hands up.

Céline, I want to get to you first. It's nice to see you again.

You can comment on what Lynne has said, but I'm also interested in.... We had Brian O'Callaghan before us at the last meeting talking about how we haven't really made the serious investments in workforce training that we need to make as we look to a clean transition. If you were to identify some of the missing pieces going forward—feel free to comment on what Lynne has said as well—where else as a federal government are we missing pieces that we really need to address if we're concerned about a green recovery and really tackling climate change in a more serious way?

• (1255)

Ms. Céline Bak: Very briefly, I would recommend that in terms of the role of SMEs in the economy the committee look at the U.S. federal acquisition regulation, subpart 19.7, on the small business subcontracting program. That is the U.S. law that requires SME procurement for all major contracts by any federal dollars, and even state dollars, I think. It seems to have a copycat in the EU at the moment.

In regard to your question on developing people and skills, the standard formula for the next gen funds in the EU is 15%. For all capex for build back better programs, whether it's the electric vehicle program, the battery program or the hydrogen program, there's 15% that is considered essential to enable workers to continue to be able to be productive in the economy.

Mr. Nathaniel Erskine-Smith: Sarah, do you want to chime in? You've got your hand up.

Ms. Sarah Sajedi: Thank you.

We actually have tried to leverage some of the work with the money for new projects, since we are an R and D company, but there are too many conditions. We even have partners, because we deal with Fiat Chrysler, GM, Toyota and many more. There are so many written conditions to actually comply that it became impossible, so we gave up.

You may want to consider looking at the conditions that have restrictions preventing people from using the funds.

The Chair: Thank you so much.

I want to thank the witnesses for being with us today. It was very helpful.

I'm a member of the Special Committee on the Economic Relationship between Canada and the United States. On February 23, it was announced that there would be, in the road map for a renewed U.S.-Canada partnership, a Canada-U.S. critical minerals action plan created. I'll work with the analysts to see if we can circulate that to the committee members, because everything we were hearing today feeds into that plan, and there are some opportunities there for us to leverage that and go forward.

I want to thank everyone today for their excellent testimony.

[*Translation*]

I want to thank again, as usual, all of our colleagues in the room, the technical support service, the interpretation service, our analysts and the clerk. It has been a real pleasure working with you today.

[*English*]

The meeting is adjourned.

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