

# **Standing Committee on Natural Resources**

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### **EVIDENCE**

Tuesday, September 27, 2016

Chair

Mr. James Maloney

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**●** (0850)

[English]

The Chair (Mr. James Maloney (Etobicoke—Lakeshore, Lib.)): Good morning everybody. I hope everybody is alert, ready to go, and revved up after watching things on CNN last night.

This morning we have a guest. Arnold, thank you for subbing today.

We have two witnesses today, Mr. Mullally from Goldcorp, and Pamela Schwann from the Saskatchewan Mining Association. Thank you both for taking the time out and coming to Ottawa to join us. We are grateful for that.

We're going to give each of you up to 10 minutes for a presentation, and then we're going to open the floor to questions from the committee.

Pam, since your presentation appears to be on the screen, it might be logical to start with you.

Ms. Pamela Schwann (President, Saskatchewan Mining Association): Thank you very much, and good morning everyone. Thank you for the opportunity to be here.

My name is Pam Schwann, and I am president of the Saskatchewan Mining Association. Our association consists of mining and exploration companies that are active in Saskatchewan, and the names are indicated on the screen.

I want to give you a snapshot of the current Saskatchewan mining industry. We're a global mining leader. The annual Fraser Institute Survey of Mining Companies has identified Saskatchewan as the number one jurisdiction in Canada, and number two in the world in terms of investment attraction, based on the factors of the region's geological and policy framework.

We have the world's highest grade potash and uranium deposits that offer us a clear geological advantage. However, a number of policy factors, including ongoing regulatory reviews and related regulatory uncertainty, land access, political stability, and lack of clear policies, are resulting in a decrease in confidence that Canada offers an attractive environment for mineral investment.

In terms of mineral production, Canada is the world's leading miner of only two commodities, uranium and potash, and 100% of both of those commodities now come from Saskatchewan. We produce 30% of the world's potash, and 22% of the world's uranium. Within Canada, Saskatchewan is the number two jurisdiction in terms of the value of mineral exports, and we are leading in terms of indigenous employment and business development.

In terms of exploration, Saskatchewan is number four in Canada for mineral expenditures. In 2015 we had \$213 million in expenditures, dominated by uranium and potash, with only minor base metals, gold and diamonds.

Mining, short and simple, is a pillar of Saskatchewan's economy. There are over 30,000 people directly and indirectly employed by the industry, and it comprises 6% of provincial GDP.

The map really shows the jurisdictions where uranium mining occurs in the Athabasca Basin, where potash is located, coal mining is along the south border of Saskatchewan with North Dakota and Montana, and base metals and gold are in the middle.

In terms of mining and public support, one of the refrains we are regularly hearing is the need to regain public confidence. I felt it was very important to share with you public polling data from Saskatchewan that indicates that nine out of 10 residents are supportive of the mining industry, including 50% who are strongly supportive. Additionally, 84% think that the mining industry is very important to Saskatchewan. That's based on a poll of 1,000 Saskatchewan residents.

Certainly, a key to this support is that EA reviews and licensing hearings in Saskatchewan are inclusive. Indigenous communities and leaders are encouraged and supported in participating, and no community or individual has been denied the opportunity to participate. Short and simple, there is confidence in the regulatory process in Saskatchewan throughout the life of a mine.

With respect to indigenous relationships and economic outcomes, mining is one of the few sectors that delivers jobs and economic growth to indigenous people in Canada. A recent paper by Blaine Favel and Ken Coates offered that the resource sector is at the vanguard of reconciliation with indigenous people in Canada. We think this is particularly true in Saskatchewan where there is a decades-long constructive relationship with indigenous people.

Mining provides wealth creation, economic development opportunities, and improved educational outcomes in the communities that have systemically high poverty rates. In 2015, 45% of all northern Saskatchewan mine workers, 1,526 people, are of first nations or Métis heritage. This represents a payroll of \$107 million a year. One in every five jobs in northern Saskatchewan is directly related to mining.

In 2015, \$388 million worth of goods and services were purchased from indigenous-owned northern companies or joint ventures. That represents 41% of all goods and services purchased. Mining operations in southern Saskatchewan have also more recently focused on engaging indigenous people as employees and as suppliers in building educational economic capacity in indigenous communities.

With respect to indigenous relationships, environmental stewardship, and community engagement, community engagement is a continuum throughout the mine life cycle, from exploration to EA reviews, to mining and decommissioning. Community participation occurs through monitoring vehicles such as collective benefit agreements, IBAs, surface lease agreements, northern environmental quality committees, the eastern Athabasca regional monitoring program, and the eastern Athabasca working group.

#### • (0855)

In terms of the state of mining in Saskatchewan, between 2008 and 2015 over \$25 billion was invested in the Saskatchewan mining industry. However, I think everybody is aware that we're shifting gears right now and we're seeing a retraction in commodity prices resulting from reduced growth in China and India and also undisciplined global production from state-owned enterprises that has produced surpluses and driven commodity prices down.

The graph shows you this significant decrease in commodity prices for uranium, from a high of \$138 U.S. a pound in 2007 down to \$25 a pound today. Prices for potash declined from a high in 2008 of \$873 per metric ton down to \$213 per metric ton today.

However, the long-term fundamentals that underpin the Saskatchewan mining sector are strong. They are simply that the world's growing population needs more quality food and clean energy on a reduced land base. That's how potash, uranium mining, and carbon capture and sequestration technology being developed in Saskatchewan are part of the solution to feeding the world and providing clean energy to the world.

That's a snapshot of where the Saskatchewan mining sector has been. What I'd like to talk about is what the future holds, which is what you're interested in now, as well.

We believe the Saskatchewan mining industry can be a primary contributor to the government's key priorities of developing a clean energy economy and indigenous reconciliation.

Nuclear power generation currently provides 11% of the world's electricity. Saskatchewan has the highest grade uranium mines in the world. We have a natural advantage in contributing to nuclear power generation. The McArthur River and Cigar Lake mines provide 20% of the world's uranium—two mines provide 20% of the world's uranium—to fuel clean energy and reduce global GHG emissions.

A recent study has also confirmed that uranium mining and milling activities contribute only a very minor amount to the total GHG, making nuclear one of the cleanest energy options for the world's growing population, particularly in densely populated countries.

In terms of carbon capture and sequestration, we do mine coal in Saskatchewan. It's used for thermal power generation, and it's our primary baseload power. When the federal regulations with respect to coal thermal generating stations were introduced a few years ago, our governments invested heavily in carbon capture and sequestration. It's successful. It's working. In Saskatchewan, one million tonnes of CO2 was captured from Boundary Dam just this past year. That's the equivalent of taking 240,000 cars off the road. Saskatchewan has a population of just a million people, so that's a very significant amount.

With China building one new thermal coal plant every seven to ten days, as well as additional nuclear power generation capacity, CCS technology will be required in the world.

In terms of indigenous relationships, as a Canadian and global leader in the participation of indigenous people and communities in mining, Saskatchewan has a portfolio of best practices to help close the economic and social gap between indigenous and non-indigenous people. The best practices are exemplified by the recent collaboration benefit agreements signed by Cameco and AREVA with northern communities impacted by northern mines and include workforce development, business development, community engagement, environment stewardship, and community investment.

In the slides, you can see some of the high-tech mining that occurs at Cigar Lake. You can see as well an individual from the Hatchet Lake Band doing some water quality sampling that's part of the eastern Athabasca regional monitoring program.

In terms of clean technology, Saskatchewan mining operations continue to reduce the energy and water intensity usage as well as GHG emissions through initiatives such as heat recovery cogeneration. We're also early adopters of technology, such as continuous mining—all our potash mining is done by continuous mining—remote control mining, such as is done at Cigar Lake and McArthur River with the high-grade uranium mines, and the use of electric vehicles. All the person carriers, used by the potash companies for their underground mining are electric now. We have a manufacturer of electric vehicles based right in Saskatoon, with Prairie Machine and Parts.

Challenges to our sector that might prohibit it from being able to contribute to its potential in the future include a number of items. Regulatory review is one. We've undergone constant review of federal environmental legislation in the past decade, and it's contributing to investor uncertainty. This includes multiple reviews of CEAA, the Fisheries Act, metal mining effluent regulations, and navigable waters legislation.

Mining activities are bearing a disproportionate amount of regulation compared with their footprint and with other sectors. For example, mining contributes less than 4% by sector of GHG, yet it's being identified as something that's required in the CEAA reviews

#### • (0900)

As to the Species at Risk Act, there are conflicting recovery strategies with a species-by-species approach, and no permanent mechanism is available. It's in the regulations, but the bureaucracy has not developed any way that a permit under SARA can be utilized. We have at least one mine in Saskatchewan that has decided not to proceed due to uncertainty with respect to the Species at Risk Act. That represents over \$2 billion in investment, and 400 long-term jobs.

Access to land is important for us as well, and there are challenges on that front.

Regarding access to capital, flow-through financing is critical for junior companies. It has led directly to mine discoveries in Saskatchewan, such as the Santoy gold mine, or discoveries with additional investment, all the while creating employment and business opportunities in a robustly regulated environment.

There is a need to continue to develop indigenous relationships within a constitutional framework. The duty to consult and accommodate is supported by the mining sector, and while there are challenges with it, we're managing to work our way through it. However, introducing concepts such as UNDRIP and FPIC into the CEAA review process introduces confusion and uncertainty with indigenous communities, governments, and industry. Nobody knows what they mean, everybody has a different understanding of what they mean, and they are raising a lot of uncertainty. Ultimately this may result in an erosion of the progress made with the mining sector and indigenous communities, as we've seen in Saskatchewan.

Ensuring a culture of safety is of utmost importance to our members. The legalization of marijuana is regarded as a very serious safety issue within the mining sector. I can't really underscore that enough.

Regarding rail transport capacity and service, Saskatchewan potash is a leading customer of the rail service, and ensuring rail capacity as well as timely service has been an issue in the past. Unless it is addressed in the current CTA review, it will continue to be an issue when potash exports increase.

Finally, in summary, mining is a pillar of Canada's current and future economy. Multi-billion dollar investments are made by mining companies with long-term vision. While this is a particularly challenging commodity cycle, the long-term fundamentals remain positive for Saskatchewan's mining industry. We have a natural advantage because of our geological framework. Mineral resources can't be shifted to other jurisdictions like manufacturing opportunities can.

Saskatchewan contributes to the government's clean energy priority both within Canada and globally through uranium mining and CCS development. Let's make sure our policies enable us to leverage our natural resource advantage while at the same time reducing global GHG emissions.

Saskatchewan mining addresses the government's priorities of indigenous reconciliation through our demonstrated and leading practices. To achieve the government priorities of clean energy and indigenous reconciliation and to capitalize on our natural mineral

resource advantage, it is critical to develop and implement a competitive policy and legislative framework to complement our geological framework.

The committee's work in advancing this position is welcome, to ensure the sector continues to contribute to Canada's economic and social well-being for generations to come.

Thank you very much.

• (0905)

The Chair: Thank you very much.

John, I think your presentation is ready.

Mr. John Mullally (Director of Government Relations and Energy, Goldcorp Inc.): Thank you for this opportunity, Mr. Chair, to address the committee today.

My remarks today will focus on Goldcorp's Borden gold project, and specifically our plans to build Canada's first all-electric underground mine.

I have information in the deck concerning other topics and areas, which Pamela has also touched on, in terms of first nations and our overall approach to sustainability. I would plan to touch on some of those things briefly and move through, so I might just direct you to specific slides.

I will move to slide 3. I'm not going to touch on the executive summary. Just quickly, on Goldcorp's vision and strategy with respect to sustainability, at Goldcorp safe, sustainable, and responsible mining is a company-wide commitment rooted in our values as an organization. We are committed to creating social and economic benefits for all of our stakeholders at every phase of the mining life cycle, from early exploration through the productive life of the mine to its eventual closure and reclamation. We are committed to being responsible stewards of the environment and performing to the highest applicable health and safety standards. These are core values that guide our decision-making everywhere we do our business.

I like on the hexagon where we have sustainability, people, and safety across the top, and across the bottom, margins, safe production, and reserves. You can see that the people side of our business only exists with the support of the production side, or the economic drivers. The economic drivers wouldn't exist without the sustainability, people, and safety of our business, as well.

I will quickly go to slides 4 and 5. I'll just mention where we are in Canada.

In Ontario, we have over 3,000 people working for Goldcorp at three operations. Starting from west to east, one is in Red Lake, where we have about 1,000 people. There is one in Musselwhite mine. That's a fly-in and fly-out camp. There are about 800 people who work at Musselwhite, with over 200 first nations employees. Another one is at the Porcupine gold mines. We have been operating at Porcupine, in Timmins, Ontario, for over 100 years.

Our newest project in Ontario is the Borden gold project. It's about nine kilometres from Chapleau. That is a district that is brand new for mining, not just for Goldcorp but, in fact, for mining. The community of Chapleau itself has been reliant on rail and timber up to now, so it's an exciting opportunity both for the community of Chapleau, and for the first nations in that district. We see a lot of potential for what we call a jurisdiction place, so we may be finding not only the Borden deposit, but there might be other deposits in that region, as well.

In Ontario, there is \$1.4 billion in GDP created and over \$300 million in government revenues.

I will move to slide 5, in terms of Goldcorp in Quebec. In April of 2015, we brought into commercial production our newest mine in Canada, which is the Éléonore mine on James Bay in Quebec. That mine will ramp up to be one of Canada's largest gold mines. Since 2007, there have been over \$683 million in goods, services, and supplies purchased from the Cree.

We have an agreement with the Cree grand council, which we have referred to as a collaboration agreement in place there. Over 25% of our employees come from those Cree communities.

Our newest project, which was acquired about six months ago, is the coffee gold project in the Yukon. It's about 130 kilometres south of Dawson City. Discussions with the local first nations are under way. Goldcorp has not had any projects in the Yukon or the Northwest Territories before, so we're excited about that.

As I said, I'm here really to discuss our GHG and our approach to energy, specifically at the Borden gold mine. We've had an energy and GHG strategy since 2012. It sets out our reduction targets for consumption and GHGs, and has an objective as well for renewables.

#### **●** (0910)

We've had quite a lot of good success in terms of what we've been able to achieve.

I will skip ahead, just to give you an idea of what energy means to a mine. Our overall spending on energy is \$98 million. That would be natural gas, diesel, and electricity, predominantly. That's about 15% to 17% of our overall operating cost. That's a very big number in terms of gigawatt hours; it's a lot. The CO2 equivalent from the various sources of energy is 120,000 tonnes.

What I want to illustrate is the impact, from a financial point of view, of the cap-and-trade framework in Ontario, as it will be from January 1, 2017 onward. Of course, cap and trade, practically speaking, puts a price on carbon. What I'd like to point out is the diesel consumption. It's over 20 million litres of diesel, which makes up more than half of the overall carbon footprint in Ontario.

One of the two most critical levers for reducing GHGs is energy conservation, which we are actively doing all the time through efficiency projects, trying to do our business and trying to essentially produce more with less.

The big one is fuel switching. In that way, really, our carbon footprint at Goldcorp is similar to my carbon footprint as an individual or a consumer—i.e., largely from how I travel, or in the case of Goldcorp, how we move waste rock and the rock that contains gold, and how we heat our buildings on the site. Fuel switching—particularly away from diesel, because its carbon content is quite a bit more than that of natural gas and other forms of fossil fuels, including propane—is the single biggest GHG-reducing strategy, in particular in gold mining, which is not a heat-based process. Our processing is a water-based process, so we don't emit GHGs from processing.

It turns out that there are many other associated benefits of fuel switching, which I would be happy to elaborate on further, such as the health and safety of our employees, productivity, and eventually competitiveness of mining—in our case, the competitiveness of our operations.

Last, we abide by the highest international standards set out for our industry, in our operations both domestically and abroad. You can see in the list here the number of external standards that we have committed to and that we practise, including commitments to industry associations and membership organizations. Goldcorp has been recognized by NASDAQ and S&P a number of times for our performance with respect to sustainability.

Our internal system is referred to as "sustainability excellence management system", and it is our integrated management system for achieving performance in safety, health, environment, corporate social responsibility, and security.

We have extensive experience working with first nations in Canada, and they make up approximately 20% of our employment. We can go back to 1996, to the Musselwhite agreement. Maybe it was the Rio Tinto mine in the Northwest Territories, but I think our Musselwhite agreement was the first comprehensive agreement between first nations and a mining company. In other companies they are known as "impact and benefit agreements", but we prefer to refer to them as "collaboration agreements", and that is how we see it. That collaboration agreement has now been in place for over 20 years, and we are currently in the process of renegotiating it.

At Porcupine gold mines, in Ontario, we have a resource development agreement or a collaboration agreement with four first nations; at Red Lake gold mines, with two; and at Borden gold project, we are in proximity to four indigenous communities.

● (0915)

The Éléonore mine on James Bay in Quebec is close to Cree grand council communities, mostly Wemindji and Eeyou Istchee.

As to what the future holds in mining—and this is the immediate future—we're moving quickly towards commercializing and adopting clean technologies at our Borden gold project, and I'd like to share our plan to build the first all-electric underground mine. An electric mine improves maintenance costs, eliminates fuel, and reduces GHGs. We use personnel carriers, scoops, bolters, and heavy equipment. That's a major challenge for mining. It's not so much the personnel carriers. You can practically see those on the road now—it's just a heavier jeep using a battery or electric equipment.

The real challenge is when you start to move tremendous volumes of rock and weight. If you think you have problems with your iPhone battery, try hauling 20 tonnes of rock up a 4% or 5% grade. You're going to have some problems with the life of the battery and the charging cycle. This is a big opportunity and it's where we're focusing our efforts to reduce GHGs. By implementing battery-operated equipment at our Borden mine, we will reduce our GHGs by 75% off a baseline. While I showed you that it was 53,000 tonnes and more than half in Ontario, depending on the design of the mine... because we are fairly carbon-light in terms of natural gas and heating —we don't actually have natural gas at that site—in this case, 75% of our carbon footprint will be eliminated.

State-of-the-art ventilation on demand drives further cost reduction and energy efficiency and is an indication of how you can manage ventilation. You might wonder why this is such a big deal. Well, ventilation represents the biggest single use of electricity. In Ontario, we spend \$30 million a year ventilating our mine. If we use electric equipment, then the mine doesn't have to be ventilated nearly as much. You can ventilate the mine with one-third or potentially 40% of what you would otherwise. Not only that, you don't expose your employees to the pollutants and the diesel particulate matter you're trying to ventilate in the first place. That's why it's a big deal.

Digital mining, smart control, and teleremote equipment allow for more continuous mining. The digitization and bringing people away from the rock face allows you to operate the mine and produce 24-7. You avoid having to take breaks when your people have to leave the mine to blast and break more rock. Operation is continuous from the teleremote on the surface.

As I had mentioned, in terms of the improvements to production, maintenance costs are now much lower. This is a huge constraint on production in mining. Your equipment is complicated. A diesel vehicle might have tens of thousands of parts, while an electric vehicle has significantly fewer. You have a huge battery instead of a motor that has all these different parts. I am not going to get into the specifics, because I don't know them. Not only do you have lower maintenance costs, but you have much less loss in energy. An electric motor doesn't lose energy through heat, whereas a diesel motor will lose a lot of energy through heat and waste, so you will essentially have a much greater number of efficiencies when you are trying to move rock.

• (0920)

Also, electric engines are quiet and result in a much better working environment. An electric mine allows an operator to minimize ventilation, as I had mentioned.

We are pretty excited. We're taking a leadership role and we are really on the verge of adopting near commercialized battery-operated equipment technology. You saw the pieces of equipment here. These ones now are basically nearly commercialized. There are other pieces of equipment that aren't there yet and this is really where I think there's a huge opportunity for Goldcorp, the industry, and for government to see significant improvements in mining's performance with respect to energy, clean technologies, and health and safety.

This really is the mine of the future. If I might go back very quickly to slide 9, because I think this is a very salient point, we were able to accomplish a significant amount of energy efficiency. We were able to take out all of our diesel backup generation, and this is at our Musselwhite mine in Ontario.

This was a mine that three years ago was on the brink of being closed, and would have cost first nations north of Thunder Bay, as well as the community of Thunder Bay, significantly. It's the largest employer in that area. With energy efficiency reducing our consumption of diesel we've been able to turn that mine around. We've reduced our all-in sustaining cost, which is the measure of competitiveness in mining. It's essentially the cost that you incur to produce one ounce of gold. We have reduced that by 30% and now —which is really exciting for the mine—we are actually reinvesting in that mine at Musselwhite. This year we're putting at \$100 million back into that mine to create more employment.

To accelerate the commercialization and to spark innovation, and to continue to drive this type of economic growth that we've seen here at Musselwhite, we need government support and investment to make it a reality and to have this adoption and commercialization happen more quickly.

Thanks, Chair.

The Chair: Thank you very much, both of you.

Mr. Harvey, I believe you're first.

Mr. T.J. Harvey (Tobique—Mactaquac, Lib.): First of all, I would like to thank you both for coming. I know it's early in the morning and, John, I know you were here early, because I think there were only two or three of us here when we first started.

My first question is for you, John. We had a really good discussion this morning about the Borden project. I'm just wondering if you could elaborate a little bit more on the cost competitiveness of that mining operation when that is up and running, and the way the company ideally would see that project. How cost competitive is it compared to your other mining operations?

**Mr. John Mullally:** We look at investments across the globe. We operate in Chile, and we're in Dominican Republic, Guatemala, Mexico, Argentina, the United States, and Canada.

This year we've allocated capital to three places: the Yukon, the coffee gold project; the one that I mentioned in Musselwhite, \$100 million there; and the Borden gold project.

Essentially, that means we're looking at a return on investment that is significantly higher than those other opportunities. Probably the most critical thing for a jurisdiction or a single community is that it be more competitive than competing jurisdictions, and we then reinvest back in.

The deployment of the technology in the way we're going to go about our operations there is going to make that a very competitive mine.

● (0925)

Mr. T.J. Harvey: My second question is for Pamela.

I just wonder if you could elaborate a little bit more on what's been done in terms of reducing GHGs in carbon sequestration and capture for the coal operations in Saskatchewan.

This spring I had the opportunity to go out to the Western Governors' Association conference. That's a group of 10 governors who are collectively spending a tremendous amount of time and effort to try to reduce coal emissions. I'm just wondering if you collaborate with them, as an industry, or what's being done to try to reduce that carbon footprint.

Ms. Pamela Schwann: I mentioned CCS because one of our members is involved in coal mining. The carbon capture and sequestration is actually through SaskPower, but because they use coal—if you're not mining coal, we wouldn't be into it. Boundary Dam was the first commercialized carbon capture and sequestration. It's also used for enhanced oil recovery. The CO2 is actually sold to an oil and gas producer, so SaskPower has a revenue stream coming in as well, to help offset that.

As I said, Boundary Dam was a \$1.4-billion total investment. Most of it was provincial money, but there was also some federal money involved in that. It's a test pilot. The provincial government now has to make a decision about whether it's going to invest in carbon capture and sequestration technology across the two other thermal coal-generating power plants in Saskatchewan.

The pilot is done. It's working successfully, as designed. We'll have to see if there's an appetite for investing in additional fleets. A lot of it, obviously, will come down to what the federal government is going to do.

We know there's a lot of pressure from groups that aren't looking at the outcome, they're just looking at coal as bad. They're not looking at the total GHG emissions. Natural gas emits far more GHG than CCS. It's not even comparable. If you're really looking for clean energy, CCS is leaps and bounds ahead of natural gas.

To respond to that, I think the government is looking to invest more, but they need to make sure their investment is going to have some payback.

Mr. T.J. Harvey: Thank you very much.

The Chair: Mr. Tan, you have three minutes.

Mr. Geng Tan (Don Valley North, Lib.): Thanks, Mr. Chair.

Last week John mentioned the company name, PotashCorp, and I want to go deeper into that company's news.

At the end of October we heard the news that PotashCorp and another company, Agrium, had been in talks about a merger. If the deal is successful, we're going to create a giant in this field, globally. Personally, I believe this news is an important sign of consolidation in the agrochemical industry, or even the mining industry. What are the pros and cons of this merger? In your opinion, what is the main motivation for this merger? Is it for the cost of production or even for the survival of the companies?

**Ms. Pamela Schwann:** The graph at the bottom shows that in 2008 the price of the potash was \$873 a tonne and that now it's \$213 a metric tonne. I think that says it, in large part.

PotashCorp has suspended operations at their brand new Picadilly mine in New Brunswick, where they had invested \$2 billion. Mosaic, which is another one of our potash mining companies, has suspended production at the Saskatchewan mine in Colonsay.

There is simply too much potash on the market right now, and our companies are making decisions to suspend production so they can remain competitive. They are having to be cost-competitive against other companies that are state-owned and don't have to watch their bottom line. We're seeing lots of production out of Russia and Belarus. They're flooding the market so the prices are low.

Our companies, I think, are really in a survival mode. They're cutting costs wherever they can. If they are merging it means they're diversifying. Agrium is very much more an agricultural supplier. They have one potash mine, but very significant operations in terms of agricultural product distribution. It's a way for them to diversify but also to survive and to rationalize costs, and to make sure they are producing out of their lowest-cost operations.

• (0930)

**Mr. Geng Tan:** This sounds as though it's for the survival of the company.

In your slides, you mentioned-

The Chair: I'm sorry, Geng, your time is up. Maybe we can get back to that.

Mrs. Shannon Stubbs (Lakeland, CPC): Thank you, Mr. Chair.

Thanks to both of you for taking the time to be here to meet with us today.

I represent a rural Alberta riding, so I am keenly aware of the importance of Canada's responsible natural resources development and all the ways in which it provides jobs and prosperity that benefit every Canadian and every community across Canada.

I'll ask my first question specifically about Saskatchewan, and then a more general one that I'd invite each of you to talk about in turn. It's about policies and best practices.

Pamela, I wouldn't mind if you could elaborate a bit on the specifics about Saskatchewan's policy framework that makes it the most competitive attractive investment environment for mining and for mining development.

Would either of you like to talk about Canada in the global context and what it is about our standards and the performance in the mining sector that makes us the best in the world?

**Ms. Pamela Schwann:** One of the factors that leads to Saskatchewan being named number one in Canada over the last two years by the Fraser Institute is that we have the world's highest grade uranium deposits and the world's highest grade potash deposits. Our geological framework gives us a natural advantage.

If we didn't have clear policies in place to being able to access the land, the right process, a meaningful process for a duty to consult and accommodate indigenous people, and security of tenure, then it doesn't matter what geological framework you have because there will be increased investor uncertainty.

I think our governments, regardless whether it's the current provincial government or the previous NDP government, have all recognized that there needs to be confidence in the regulatory process, and there has to be clarity in the process. That's been helpful to our sector.

We have mines in every reach of the province. People know of their importance and that we're responsible stewards around safety and the environment, and I think that's largely our public support.

**Mr. John Mullally:** Yes, it's the geological endowment, for sure, the cluster of skills.... You have communities like Rouyn-Noranda, Val-d'Or, Sudbury, Timmins, and Red Lake where there have been decades, if not centuries, of mining.

It's also the cluster of skills that reside in Toronto and southwestern Ontario when it comes to engineering, geology, finance, legality, and raising capital with the major banks and many of the legal firms—and these numbers are out there—because significant parts of their business, or portions of their business, are with respect to mining.

The other thing I can say about the community is that you have accommodating communities that want mining operations, and that's huge. That's one of the biggest things. You have stable tax, a political and legal framework....

I think the thing that's keeping investment out right now is regulatory uncertainty, which is just a code name for how you work with first nations throughout the regulatory process. What could you expect from timelines, and what are the requirements, because there is no framework? Things like UNDRIP and so forth, don't help.

That regulatory uncertainty right now is what's identified as the single biggest barrier.

Mrs. Shannon Stubbs: I was going to segue into that issue next. I have had the opportunity to meet with various representatives of mining project proponents, and also with associations in B.C., the

Yukon, and other areas. They've all echoed your comments about the importance of predictability, clarity, certainty, and timeliness in the regulatory process.

A lot of them have talked about the importance of one project with one review, and how that, combined with high operating costs that are negatively affecting their projects right now, is the most important concern and priority they have for their businesses.

I'd invite you to comment more if you'd like on the importance of clarity and uncertainty in the regulatory process.

I don't know if you have any comments on the impact of the mining exploration tax credit, and if that has provided support for exploration and mining development companies, and whether or not either a longer-term extension of the METC, with the flow-through share provisions, or even a permanent implementation of the METC, or other fiscal or policy tools, might assist in supporting your work.

• (0935)

**Ms. Pamela Schwann:** If I may start, regulatory certainty, I think, also extends to not just one project when reviewed, but to ensuring the people who are supposed to be participating in the review participate in the review.

I can't underscore how significant this piece of legislation, the Species at Risk Act, is to the mining sector when you have things like woodland caribou that have wide ranges, and the impact of its designation on projects. We have one project that was shelved, and not because we have low woodland caribou populations in Saskatchewan; it's because Environment Canada, in the species at risk portfolio, would not provide any certainty in the assessment review. So there's a lot of regulatory uncertainty.

In terms of the exploration tax credit, for junior companies it's very significant in Saskatchewan. As I mentioned, we've had at least one mine go into production that was largely funded through flow-through shares. A number of exploration properties that continue to develop—those are all junior companies—have had a very difficult time raising capital, so the flow-through shares have certainly been instrumental in helping them keep exploration going. Year by year is better than nothing, but certainly longer term would be good. And I think we know it's successful because Australia has copied Canada in terms of implementing this. It is a successful strategy, and a great return on investment.

The Chair: Thanks. That's right on time.

Mr. Cannings.

Mr. Richard Cannings (South Okanagan—West Kootenay, NDP): Thank you both for coming here today.

I'm going to start with Ms. Schwann, about Saskatchewan. I just wanted to talk about the economics of thermal coal. You mentioned the very well-known and much lauded carbon capture and storage that SaskPower has. Also in passing you've stated that China is building a new thermal coal plant every week, when in fact I think this summer they announced a full moratorium, that they weren't going to build any more for the next few years.

But that aside, it's just the economics of CCS. It's a very expensive technology. How does that relate to the economics of thermal coal, in general, when we seem to be demanding that we move away from intensive GHG energy such as that?

**Ms. Pamela Schwann:** I think it's only intensive GHG if you don't capture the emissions, so that's the purpose of the CCS.

Our companies don't include SaskPower. I would prefer to defer that question and invite you to invite SaskPower here to talk about the CCS sequestration and the economics of it, because I am just not in a situation that I can speak to the economics of CCS.

Mr. Richard Cannings: My question was more about the continuing economics of thermal coal.

**Ms. Pamela Schwann:** I think when you look at the economics of moving towards any different type of power generation, whether it's renewable.... Ontario is suffering significantly right now. It's my understanding that they're energy poor in rural Ontario because people can't afford their electricity bills. It's not cheap to move that way.

Regardless of what you do, it's going to be more expensive. We're advocating for the retention of thermal coal because we have locally available resources that provide employment and jobs for communities in southern Saskatchewan, and we want to see those retained. We think that if we can develop those resources responsibly through the use of CCS technology, why wouldn't we do that?

• (0940)

**Mr. Richard Cannings:** With your mention of power in rural Ontario, I'm going to move to Mr. Mullally, and your company's great work, it seems, in moving towards electrification of your operations, especially in Musselwhite.

I've read articles. One says that, "Musselwhite Mine gets its electricity from an existing but inadequate 115kV line to Pickle Lake and a private190-kilometre extension of that line to the mine site."

I could go on with the details, but I just wonder how those existing infrastructure challenges affect your operations, and whether this is some place the federal government might—

**Mr. John Mullally:** We're fed off northwestern Ontario. If you talk about the energy supply...and there's little in northwestern Ontario. We're in northwestern Ontario, in Red Lake and in Musselwhite. That's a 400-kilometre, what they call, single radial line. It goes out 30 times a year. It's very poor supply.

I'd be remiss if I didn't mention a project that we were involved in from 2012, which is called Wataynikaneyap Power. Now it's a wholly owned transmission company. It'll eventually be power operated and owned by 20 first nations along with.... Of course they have the backing of an infrastructure company, etc.

Goldcorp's role was to bring power through a large transmission of 220 KV up through to Pickle Lake. We brought the first nations that have the need to bring power, not just more power, just some power to diesel-dependent communities.

Goldcorp's intention was to bring the communities together to get aligned. Then we handed it off. It was a 50-50 JV, now it's a wholly owned company called Wataynikaneyap. I know probably some of

you are aware of this. It'll really make a dramatic difference in northwestern Ontario.

**Mr. Richard Cannings:** Thanks. I was going to mention Wataynikaneyap, but I didn't know how to pronounce it.

I want to move on. You operate primarily in Ontario but also, you mentioned, in Quebec, in Éléonore. Could you comment on your experiences in those two jurisdictions, Ontario and Quebec, and if there are any differences that might be instructive for us?

**Mr. John Mullally:** First would be infrastructure. Quebec has a plan. It's called Plan Nord. They have a plan to help and support the deployment of infrastructure in the north.

Second, electricity, not just infrastructure but the fact that you've got supply to the north, and a lot of supply. So you see there's quite a lot of development in northern Quebec.

People speak about the differences between the Cree from Quebec and the Cree and Ojibwa from Ontario. There are differences. The Cree grand council has been working with Hydro-Québec since 1974. There are differences between all the communities that we work with, but that's one that people do speak quite a lot about. Both communities, both provinces, are accommodating. Again, those are great places to mine. Challenges exist, but those continue to be places where we reinvest.

The Chair: You have 30 seconds.

**Mr. Richard Cannings:** Just quickly then, Mr. Mullally, on UNDRIP and free, prior, and informed consent. You work in Chile where that is in place. I just wondered if you had any comments on Canada's.....

**Mr. John Mullally:** I was going to say earlier, we rely on our relationships with the communities. We build relationships so we understand the community's traditional way of living, what their expectations are, and so essentially that's the way we go about our business.

As I've said, it lacks the other stuff because there's no common understanding of how these things are deployed, let alone Supreme Court decisions. That would be part of the same. A principled policy framework that lays out essentially, for instance, even just the identification of communities, the impacted communities, because those are things that the communities themselves would like. They're surprised by certain others that are part of the catchment or a part of a specific...that are impacted by a project.

A policy framework that would provide certainty and an understanding would just become more of a business process for us, and then we'd continue to go about the most important part for us, to develop the relationship and include our communities in whatever procurement and employment, environmental consultation in all aspects, as they are today. That is the way it is most effective for Goldcorp.

● (0945)

The Chair: Thank you.

Mr. Serré.

Mr. Marc Serré (Nickel Belt, Lib.): Thank you, Mr. Chair.

I'll be sharing my time with Mr. Tan, who has the first question.

#### Mr. Geng Tan: Thanks.

I agree with Richard. I don't think China is continuing to build that many thermal coal stations. Instead, I think they are going to build 60 nuclear stations, so I think that probably there is a need for us to sell more yellow cake to China.

I want to finish my question with Pamela.

We talked about a lower commodity price and the survival of companies. However, on your slides, you also mentioned the positive long-term fundamentals. In your opinion, what will the mining industry look like in Saskatchewan in the next five, 10, or 15 years?

**Ms. Pamela Schwann:** Our reserves for both potash and uranium are significantly longer than that.

I would hope that the policy framework allows us to continue to have mining. I would expect that we will continue to have more uranium mines, although we can certainly ramp up production on the existing ones more than they are; we would just need the appropriate CNSC licences.

Certainly we've had new uranium discoveries in the Athabasca Basin. Cameco's millennium deposit would be ready to go if we could get some SARA certainty on that. There are also exciting new discoveries on the west side of the Athabasca Basin. That would mean great employment for communities like La Loche that really need some employment and business anchor.

We'd also see additional potash mines producing at a sustainable rate. We continue to see coal as an important part of our portfolio. We hope that companies like Goldcorp might come into Saskatchewan and start looking at some of our prospective gold areas.

I should say rare earths too. We have rare earth potential, and that's going to be an important thing in the future.

**Mr. Marc Serré:** Before I ask the question, Ms. Schwann, I want to clarify one of the comments you made earlier about policies and legislative challenges, regulatory review. You mentioned those challenges of the past decade.

Is that what you were referring to over the last decade? Just a yes or no

Ms. Pamela Schwann: Yes.

Mr. Marc Serré: Thank you.

Going back, one comment is on having Goldcorp and Saskatchewan look at the innovation you've done related to first nations. I've heard often of the collaborative agreements that you've put in place that are leading edge across the country, in both northern Ontario and Saskatchewan. I want to thank you for your leadership on that. Many in the mining industry are looking at copying some of the work you've done over the last decades on this.

My question is more related to the mining industry and the potential we have to grow the economy. When we look at a single mine versus clusters, ecosystems, we know in northern Ontario and in Saskatchewan we have existing clusters.

How can we expand the clusters we have right now to create more of those spinoff jobs in the mining and supply industries and export products around the world?

I'll get back to the issue of electricity and battery after. I just want to get both of your sense of what we can do as a government and industry to expand the clusters and make them more of an ecosystem, to create more mining and supply jobs and exploration and export across the world?

• (0950)

Ms. Pamela Schwann: I'll take the first shot at that.

I think if we talk to anybody in exploration, the best place to find a new mine is next to an old mine. There were some incentives in place that would help to offset some of the expenses for deep drilling. A lot of the reserves are now more and more at depth, and it becomes uneconomic at a certain point to drill.

In mining, we use the term "brownfield", which means an existing mine site. Perhaps looking at developing some mechanisms that.... Maybe it's through a regulatory review, that if it's within a certain area, you don't need to undergo a five-year-long assessment process. Or maybe it's a financial incentive that looks at incenting brownfield exploration. That might be one way to facilitate more of that cluster approach that you're speaking about.

Mr. John Mullally: If I go back to what I said in the presentation around accelerating commercialization and adoption, I think, Sudbury, in particular, and Rouyn-Noranda, are places that have come along in terms of the evolution of the industry. As things have changed, because of the skills that are in those clusters, they've sort of changed and are leading the way.

I think we are starting to see significant signs that the time is now to turn to real, clean technologies; automation; bringing people away from the face; and lots of things that you see in the Sudbury basin as well.

To look at mining as a relic of the past is not going to support the clusters. I think this is an important industry to support, and the faster that things are commercialized....

Some technologies exist, but I think that places that already have the base of skills there are in a position to supply internationally. We see lots of those opportunities with groups like the Canadian Mining Innovation Council, or CMIC, when coordinated with industry, the OEMs, and academia. We have our finger on things that are going to reduce our impact on water, deploy even more clean technology, make us more productive, improve health and performance, and improve environmental performance.

The Chair: Mr. Barlow.

Mr. John Barlow (Foothills, CPC): Thank you very much, both of you, for being here.

Ms. Schwann, I'm really impressed to see that you have maple leaves you collected from a lawn somewhere. Are they to take home to Saskatchewan?

Ms. Pamela Schwann: They're a present, actually.

I used to live in Ottawa when I was student.

**Mr. John Barlow:** When I had my family here the first time I was first elected, the first thing they did, too, was to collect maple leaves off the lawn.

I want to talk about an article you had on your website called "The Challenge of Managing Carbon Emissions in Saskatchewan's Mining and Mineral Sector". My understanding is that it was posted as a response to the Liberal government's recent announcement that they may well impose a federal carbon tax on provinces if they don't meet their emissions targets.

You come from Saskatchewan, where your premier has been vehemently opposed to a carbon tax. You've also done some work in your industry to reduce your GHG emissions on your own through industry, without having to have emissions targets or caps imposed on you.

Could you talk a little about what the negative impacts on your industry would be if a federal carbon tax were imposed? Is this something that your industry has talked about? If your premier has said that he does not want a carbon tax provincially, what would it mean if a federal carbon tax were imposed on your province and your industry?

Ms. Pamela Schwann: That's a tricky one.

The report that you mentioned said that there is no best way to do it. There needs to be some flexibility, depending on the local environment and the local economy, in terms of the best way to incent GHG reductions, which is what everybody wants to do in the end. It's just a question of the pathway there. I think what this paper is saying is that there are multiple pathways to the end goal, not just one.

As an industry, particularly with potash and uranium, we are not able to pass on to the markets any carbon taxes that we might be incurring. It's just not possible, so we need some protection of trade-exposed sectors, like we have with Saskatchewan. That's something that we're very cognizant of and something our premier is very cognizant of as well, because, of course, oil is another one of our big exports. That's another one where we have to take the global price. We can't pass on the cost of carbon taxes. That's the big sensitivity.

**Mr. John Barlow:** From your perspective, would that make your industry in Saskatchewan uncompetitive on the global market in potash and uranium?

**Ms. Pamela Schwann:** Unless there's some way to ensure that other countries supplying those products are also having to pay that, I think it would make it more difficult.

Mr. John Barlow: That's a really good point. I appreciate you mentioning that.

Certainly, in discussions I've had with other people in the mining industry, there is also a concern that we've seen these new restrictions put on the oil and gas sector, in terms of upstream GHG emissions. There seems to be a real concern from the mining industry that they're next, in terms of having to account for the upstream GHG emissions.

Is this something that your industry in Saskatchewan is concerned about?

Maybe, John, you could touch on that, as well.

Are you taking steps to bring that into consideration in your longterm planning? What impact would that have on your bottom line?

Mr. John Mullally: Do you mean upstream, from our suppliers?

Mr. John Barlow: Right now, it could be anything. Right?

Mr. John Mullally: Like our natural gas distributors?

Mr. John Barlow: It could be natural gas distributors.

Mr. John Mullally: Yes, we'll be paying in Quebec as of 2017. We've been budgeting for...We've had a carbon price for some time now. If there was certainty over that price of carbon, that would be helpful. Even in Ontario, the framework goes out to 2020 and then, after that, it's a question mark. Regarding the price of carbon, I've seen numbers anywhere from \$20, all the way up to \$150, and that's with the market. The Western Climate Initiative includes California and Quebec, as well. So, you have a big market, and you still have those kinds of discrepancies on price. That's a problem, for sure.

Then you have this significant amount of revenue that's going to be raised. Our question is, well, is it okay? As I had mentioned, we don't have transmission lines in northern Ontario. We have a relatively clean grid, and the province forecasts \$8 billion in revenue over the next four years. How is that going to be deployed? That's a bigger question for industry, for me.

Mr. John Barlow: To John, I was really impressed with the work that you've done at the mine, investing another \$100 million into that, and things that you've done on your own to reduce your carbon emissions. You're talking about the first mine in Canada that you're going to be doing that's going to be electric.

We've heard from my colleagues on the other side that the infrastructure issues to get to some of these more remote facilities is tough, and I can certainly understand that.

Is this the type of technology that you can use as a template to move to James Bay, and to some of these more remote mines, or are we a long way from that? What do you see as the connector to get us from where this is to, maybe, some of those more remote facilities?

**Mr. John Mullally:** Right now, this is a transmission or distribution-connected solution. At a remote mine that would be a fly-in and fly-out camp, like the Éléonore mine, without a transmission line, with this current configuration, I don't think so. Essentially, you need backup generation with diesel motors.

**Mr. John Barlow:** Do you still need the diesel power for fuel for those ones?

**Mr. John Mullally:** Yes, at this point. A lot of the opportunities that go across northwestern Ontario are untapped, not just because of electricity and transmission but also roads, and to be able to access those areas. Infrastructure is a big thing just to access the economic opportunity, and also do it in a way now with this battery technology that's possible and clean.

**(1000)** 

The Chair: Thanks.

Ms. Pamela Schwann: Maybe I could just jump in and—

The Chair: I'm going to have to move on to the next person, I apologize.

Mr. Lemieux.

[Translation]

Mr. Denis Lemieux (Chicoutimi—Le Fjord, Lib.): Thank you, Mr. Chair.

Thank you as well to our two witnesses.

My first question is for Ms. Schwann.

Last week, the president of the Mining Association of Canada explained to the committee that the 39 members of the association adhere to four principles. The first principle is sustainable mining. The second principle is a commitment to maintaining a good relationship with the first nations. The third principle is biodiversity protection and conservation. The fourth principle is the implementation of an exemplary energy and greenhouse gas reduction management system.

I see that your association is guided by those four principles.

Can you tell us how the Government of Canada can help you improve those four principles in Saskatchewan?

[English]

**Ms. Pamela Schwann:** I'm sorry, my French is not very good. Can I have a translation, please?

The Chair: You should have an earpiece.

**Mr. John Mullally:** I can translate. Pierre had mentioned four areas: sustainability, first nations engagement, biodiversity, and energy. He wants comments on how the government can support those areas with respect to mining in Saskatchewan.

**The Chair:** Why don't we get the earpiece operating, and we can get the question asked again. We'll start the time over.

[Translation]

Mr. Denis Lemieux: Last week, the president of the Mining Association of Canada explained that the 39 members of the association adhere to four principles. The first principle is sustainable mining. The second principle is a commitment to maintaining a good relationship with the first nations. The third principle is biodiversity protection and conservation. The fourth principle is the implementation of an exemplary energy and greenhouse gas reduction management system.

I see that your association is guided by those principles.

Can you tell us how the Canadian government can help you improve those four principles in Saskatchewan?

[English]

Ms. Pamela Schwann: Thank you.

I think the way the federal government can help us, first on the sustainability question, is making sure there are clear policies and regulations in place, and also that there's a clear path towards implementation.

What we did see in the last regulatory review was a lot of regulatory changes, but the implementation of those changes was not very good. Whether it was because there was not enough capacity within the departments, or whether they weren't sufficiently involved in the regulatory change, I'm not sure. But the implementation, particularly on the fisheries, navigable waters, was not very successful.

In terms of first nations, I think you can help us by not helping us. We have a good process in place. It works for us. Don't complicate things. That's short and simple. We have a great relationship. There are a lot of expectations being raised out there right now, and a concern about whether they're going to be able to be met with the language around FPIC, and people not being sure what that means.

In terms of biodiversity, we're helping to support right now a \$5-million study through our membership, actually through our own association, looking at the woodland caribou populations in Saskatchewan in a direct response to its listing as an endangered species under the Species at Risk Act.

We support science-based decisions. We wish Environment Canada would actually also work in a science-based environment. We have concerns about the way that the COSEWIC process works.

A lot of the recommendations coming out of COSEWIC are not science-based. There's a lack of data that supports a lot of the recommendations coming out. It's like a waterfall from that group. We wish they would actually work in a more science-based environment.

In terms of energy efficiency, a lot of times energy efficiency, and I think John has mentioned this, relates to cost savings as well. So it's a win-win on that, if we cannot just reduce GHG and reduce energy consumption, but also reduce water consumption. They are big factors moving forward.

I hope I've addressed your questions. Thank you.

**●** (1005)

[Translation]

Mr. Denis Lemieux: Thank you.

[English]

**The Chair:** I have a question. On this discussion about regulatory uncertainty and predictability, you're not the first two people to have this discussion.

My question is, in the case of Saskatchewan—but John, you can speak to it across the country—is the regulatory uncertainty a federal issue or is it a problem because there's a conflict between federal regulations and provincial regulations?

**Ms. Pamela Schwann:** Where we see most of the regulatory uncertainty right now is on the federal side, whether it's because we have duplication with CEAA, or more particularly on a number of files with Environment Canada, at the moment. Our provincial process is fairly well understood. We think that our regulators work with us and with communities to come to a resolution. We don't see that same effort particularly with Environment Canada.

**Mr. John Mullally:** I don't think it's a simple answer here because, even if you look at the regulatory process itself, as I was mentioning earlier, it's not only about the impacts of a proponent's project on communities, it mixes in all sorts of issues. There is historical legacy, community concerns with other communities. Unfortunately, I don't have a simple answer here.

Ultimately, since first nations fall under the jurisdiction of the federal government, I would think a principle design that's geared to greater clarity and understanding of process, both for the communities and for companies, is going to support resource development, and create a considerable increase in understanding and levelling expectations.

The Chair: I have another question, but I'll save it for later.

Arnold, it's over to you.

Mr. Arnold Viersen (Peace River—Westlock, CPC): Thank you to our guests for being here today.

My question is mostly for John, specifically on the Musselwhite project. That really intrigues me. One of the things that I know from my own riding in northern Alberta is that power reliability, variability, and the price of it, come into play on these large projects. I have some paper manufacturing pulp mills that use copious amounts of electricity. They have their own diesel generators that kick on when the price goes over a certain amount.

How does that affect your project, specifically on the Musselwhite project? Is it reliable and does the price factor in? Does it make sense to go electric versus diesel, just on the cost analysis?

**Mr. John Mullally:** On this one, it's an expansion project that's going to push the life of the mine out another three or four years. You're looking at 811 jobs for an extra three or four years, and another million ounces in gold production, so it's significant.

Due to the limitations on that line, to answer your question, we'd actually have to go to backup generation based on the provincial response that I got yesterday. That's a disappointment because we've gone and eliminated all of our diesel backup generation, so they have no solution for us currently. I should say, we have two options: diesel backup generation, or just even increased conservation and finding even more efficiencies. There are probably some there, I suspect.

What was the second part of your question?

• (1010)

**Mr. Arnold Viersen:** To run electric versus diesel, is it a cost benefit to run electric, or is that just truly to meet some GHG targets that you're doing that?

Mr. John Mullally: I was excited that you asked that, so I forgot.

You actually have a net-net decrease in electricity when you run electric equipment. It's always better to deploy electric equipment for

the consumption of electricity because of this reduction in ventilation. I spoke about it earlier. Ventilation in our underground mines is half of our electricity consumption. If you have fewer pollutants in the air, then you have to ventilate much less. You can imagine pushing air down from the surface almost a kilometre underground in various different locations takes a tremendous amount of fan power.

**Mr. Arnold Viersen:** How about on the surface, supplied electricity versus diesel power electricity?

As I was mentioning, in our area they have a 10-megawatt power bank...the 10 diesel-powered...the largest engines I've seen running their power generation. They say that's more efficient than just buying it off the grid.

**Mr. John Mullally:** Thankfully, we do have an incentive to get off that. We also have about 12 megs of backup generation there. There is incentive to get off because the power on the grid is cheaper.

Mr. Arnold Viersen: You mentioned UNDRIP a little bit. I normally sit on the indigenous and northern affairs committee. We got a letter from the Canadian Chamber of Commerce saying that the current UNDRIP promises have led to some significant reduction in just any projects going forward because nobody knows how it's going to go, and they've laid out a nice template on which way to go on UNDRIP.

Do you have any suggestions for us on that?

Mr. John Mullally: I sound like a broken record a little bit on this, but we really rely.... We think that the social licence to operate —that's not my favourite term—which really is granted, denied, given, or withheld, I'm not going to use the C-word, occurs on the ground with the community. We work directly with the communities, and the more we understand, again, issues, impacts, and how we can include our communities in the development of the project....

In terms of UNDRIP or Supreme Court decisions, or even the section 35, it doesn't provide, in practice—this is from experience—clarity for the proponent on the ground. We think there's an opportunity to look at a principled framework that aligns interests for industry, first nations, and government, and that potentially gets people to a better understanding, a consensus, over what projects work and don't work. This is not to say that projects always work, but if they don't, then you understand right away and you move on.

The Chair: Thank you.

Mr. McLeod.

**Mr. Michael McLeod (Northwest Territories, Lib.):** Thank you for the very interesting presentations. I'm quite impressed with the involvement aboriginal people have with the mining industry and with your companies.

I come from the Northwest Territories. Mining is playing a very big role in the areas of employment, training, and working with our aboriginal communities. It's certainly a way for our younger people to find employment and training, and become a very viable part of the community.

We have quite a few mines. We just had a diamond mine announce their opening in Gahcho Kué. They will be bringing over six and a half billion dollars to the NWT economy.

I see so many good things from the mining industry. My son works with the mine. He's been there almost 15 years. He went right from high school into the industry, and he stayed there. He's making a very good living.

I've also been watching, with interest, how the mines deal with communities. I know for a fact that for Gahcho Kué there are five impact benefit agreements and training. They've signed agreements on with the communities. There's been a real sense of relief from the communities that the mine is there.

We have other mines. I heard you mention Rio Tinto, a gold mine in the Tlicho area that we'd like to see move forward. They have challenges. We, in the north, have very little in terms of roads and adequate airports. Only 12 out of 33 of our communities have roads. Even though this mine isn't there yet, there are a number of communities where there are no roads. To make it viable, we'll need roads.

Our government has promised to review the environmental assessment process to make it more modern, more accountable, and more credible. I wanted to ask if you could tell me what you see as the role for indigenous Canadians in evaluating the mineral resource development projects. We have had some of the regulatory boards from the Northwest Territories come up and talk about how they've included aboriginal people. Some 50% of their boards are aboriginal and it seems to work well. I just want to ask if you've looked at that whole area.

#### **•** (1015)

**Ms. Pamela Schwann:** I think I mentioned that one of the reasons we feel we have significant public support is because indigenous people are not just involved at the EA stage. By then, if you're already at the environmental assessment stage, you're well into knowing you have a good thing in terms of development, so it starts before that.

We've had a number of review panels in Saskatchewan, starting with the Bayda Commission back in the 1970s, that really laid down the foundation for stating that local communities that are most impacted by mine development should have preferential treatment in terms of employment and business opportunities. I think that really is what laid the foundation for the great participation we have in northern Saskatchewan of first nations and Métis people.

Then we had subsequent commissions that established mechanisms, like the environmental quality committees, where people from impacted communities meet regularly with the provincial regulators and also with the federal regulators—CNSC is involved in that—to learn about what's happening at the companies, the mine sites, and elsewhere.

I think it starts long before an environmental assessment review. It starts early on in the process.

There's intervenor funding that's available to first nations and Métis communities to ensure that there's understanding of very technical documents.

We've also seen business developments. The Lac La Ronge Indian Band has a company called CanNorth Environmental Services, which is really one of the leading environmental service providers in northern Saskatchewan. They've recently expanded, I believe, to have an office in Ontario.

I think there's more capacity that's being built up, but I think there also still needs to be more understanding of environmental western science in some of the first nations and Métis communities as well as an understanding of traditional knowledge by panel members. Your suggestion of having an indigenous person as part of the panel has merit as well. We did see that on one of our panels. Chief John Dantouze participated for part of the federal-provincial panel on uranium panel hearings in the mid-1990s.

#### (1020)

**Mr. John Mullally:** I have one comment on your question, Mr. McLeod.

I can say right from the outset that you get on the land at the planning and permitting stage, when you're literally having no impact but walking the land, and already consultation and discussion with the communities start. With any of the early exploration permits—the air, water, noise, industrial sewage, and anything that's going on with water, streams and rivers—all the way along there's a tremendous amount of consultation. It's not really consultation as much as it is inclusion...where those things don't advance. There's a tremendous amount of discussion there.

At Éléonore in Quebec with the Cree, the environmental impact statement was basically co-written, so we worked with our Cree partners at that time. We already had the relationship fully in place, and the agreement was far enough down the road that there wasn't something we were trying to get somebody to agree to. We were working together, collaborating, and moving that forward.

I think the level of integration, just from what I've witnessed, is very high.

The Chair: Thank you.

Mr. Cannings, you have three minutes.

Mr. Richard Cannings: Thank you.

Ms. Schwann, I just want to talk about COSEWIC. I have to take exception to your comments about COSEWIC being non-scientific. I was co-chair of COSEWIC for eight years, and I can assure you that I was very impressed during those eight years with how careful and scientific that organization is. If anybody wants to see COSEWIC in action—this is a committee on the status of endangered wildlife in Canada—they meet every year in the last week of November in Ottawa. They welcome observers, so please come.

Getting to caribou in particular, I don't know the science or data on caribou in Saskatchewan. I know that woodland caribou are collapsing in various parts of the country, that's why they were listed as threatened. I know that in Saskatchewan they've banned sport hunting because they are so concerned about populations.

If your organization were telling the government how to regulate the cumulative impacts on threatened species such as caribou, how would you do that? This is not just an iconic species—it's on our quarter—but it's a key species of the boreal forest. How would you assure all Canadians that those populations would be viable in the long term through regulation of cumulative impacts?

**Ms. Pamela Schwann:** I think it's understanding what your population is. I'd be happy to send you all of our responses back to COSEWIC that question the data that's being pulled before these listings because there's certainly been more than just a handful of cases. I'll be happy to forward that to you.

Any time an environmental assessment is done, just as an example, there's the population, demographics, and a profile of a number of different species, which are provided as baseline data. None of that data is ever compiled. We've had a dozen environmental assessments from various projects that have gone in. There is no compilation of the data. It sits in isolated pockets. It should be compiled by a government, so everything is available for everybody to see and use. That has not been done. We undertook the effort actually to pay to have that done, particularly for the caribou, and submitted it to Environment Canada. These were all environmental assessments that were done. Environment Canada refused to accept that data.

These are some fundamental things that shouldn't happen. They are all science-based. They're done by consultants who are professional in their work. We need good data and we need good databases in order to make good decisions. We see things in silos right now rather than integrated, and I'm sure Saskatchewan is not alone in that. I'm sure if you tried to find a comprehensive database for other species in other areas, you would have the same issue. I think there certainly could be some collaboration amongst the jurisdictions in developing and sharing databases.

The caribou recovery strategy plan was based on a model for caribou populations in Quebec. It had nothing to do with Saskatchewan. It had to do with linear developments that came

from Alberta, where you had intensive oil and gas disturbance, and you needed a 500-metre buffer in terms of linear disturbance.

The fellow who is in charge of that study, Dr. Phil McLoughlin, said it was inappropriate to use that buffering in northern Saskatchewan because it was not the same type of disturbance. We have 3% man-made disturbance in northern Saskatchewan. We have a fire regime that causes over 45% natural disturbance, which is natural. According to Environment Canada's recovery strategy, they don't want to let any development happen with anything more than a 35% disturbance.

When you have a fire regime that's 45%, which happens on a more regular basis than 40 years, how are you going to have any sort of development? We know our caribou populations are there. Under Environment Canada's model, theoretically there would be zero caribou in northern Saskatchewan. We know that there is a healthy population. Their model is wrong. They need to realize that.

**●** (1025)

The Chair: Thank you. I'm going to have to stop you there.

Unfortunately, we are out of time. I just wanted to say thank you to both of you again for taking the time to come in. This is a wideranging topic, and as you can see, we could go on for much longer than the time we're allotted. I appreciate both of you coming, not only attending, but also the focus of your presentations.

Mr. John Mullally: Thank you, Chair.

The Chair: Okay, we're going to suspend for two minutes, and then we're going to go in camera and talk about committee business.

[Proceedings continue in camera]

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