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Chair

Mr. Leon Benoit

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● (1530)

[*English*]

The Chair (Mr. Leon Benoit (Vegreville—Wainwright, CPC)): Good afternoon, everyone.

We're here today to start our study on resource development in northern Canada. We start today with some presenters from the Department of Natural Resources. We have with us today Anil Arora, assistant deputy minister, minerals and metals sector; Ginny Flood, director general, minerals, metals and materials policy branch; and Patrick O'Neill, director general, explosives safety and security branch.

Thanks to all of you for being here today. We are very much looking forward to your presentations, which will be followed by questions and comments.

Please go ahead, Mr. Arora.

[*Translation*]

Mr. Anil Arora (Assistant Deputy Minister , Minerals and Metals Sector, Department of Natural Resources): Thank you. It is really a pleasure to be here with you today.

Like you, we are very interested in the role we play in the minerals and metals sector as well as in the development of resources in the north. I am going to make a brief presentation on our role in this sector and more specifically in the Canadian North.

[*English*]

I believe you all have the presentation. I'll just spend about 10 to 12 minutes on the presentation itself and, as mentioned, we'll get into some of the interactive dialogue, which I think will be of some value.

To go to the first slide to start, our mandate at Natural Resources Canada is to support sustainable development practices through science and technology, gathering and disseminating analysis and information at both the domestic and the international level, and working in collaboration with our external partners, such as industry, non-governmental organizations, aboriginals, academia, and domestic and foreign governments. As well, we work closely with our federal departments, such as Environment Canada, Transport Canada, the Department of Fisheries and Oceans, DFAIT, Industry Canada, et cetera, that are interested in northern development and natural resource development.

As to my role specifically as the assistant deputy minister for the minerals and metals sector at Natural Resources Canada, we're the lead federal department that provides expertise on various issues, whether it be policy or science and technology related to exploration and mineral and metal development. I'll go to the next slide now.

[*Translation*]

As you may know, we share responsibilities with our provincial counterparts south of the 60th parallel.

[*English*]

The provinces here are the resource owners and the federal role is related to a specific legislated authority, such as fisheries, navigation, or transboundary trade, and we share responsibility for these issues such as environmental protection, health and safety, and economic development. The major difference between being south of 60 versus north of 60 is that the federal government manages resource development north of 60, with the exception of Yukon, which, as of 2003, has had the responsibility devolved to them.

The Minister of Aboriginal Affairs and Northern Development Canada is the principal minister responsible for northern issues, and works closely with departments such as our own, DFO, Environment Canada, Transportation Canada, et cetera.

Our role at Natural Resources Canada is to promote sustainable development, and we're active in supporting the environmental reviews of resource projects led by review boards in the north. We provide geoscience expertise. I understand that my colleague Brian Gray is to appear in front of you in the near future to answer some of your questions related to their specific role as well.

Again, for my part, we review technical documentation and provide scientific and technical expertise in the areas of minerals and metals sciences, including expertise related to things such as acid rock drainage, waste management, mine effluent, and metal leaching.

● (1535)

Our goal is to ensure responsible development that reduces environmental impacts and maximizes benefits to communities and all Canadians.

The next slide, as you can see from the graph at the top right, shows how exploration spending in the north fluctuates over the years. However, we predict that the resource-rich north will become a new frontier for Canada. For example, in 2010, mineral exploration and deposit spending was $498.1 million for the three territories, and accounted for almost one in every five four dollars that Canada spent on mineral exploration. In 2010, the three territories accounted for 6.3% of the value of total Canadian mineral production.

Diamond mining represents 88% of northern mineral production in terms of value, and there is clearly an opportunity to diversify and grow in other commodities. That's going to be one of the themes, I'm sure, that we'll talk about a bit.

We note an interest in the north over the period 2006-2010, where we saw a 53% increase in total mineral production; and given recent interest, we see potential for this trend to continue. Again, we could probably talk about some of the factors that are leading to that increase globally.

The next slide is the one with the nice picture of Agnico-Eagle Mines. Building on what I just talked about, mining is the main driver of economic activity in northern Canada. This includes north of 60, but also northern regions of many provinces. So it's not just north of 60. For example, the Plan Nord in Quebec, the Ring of Fire in Ontario, and the northern regions of British Columbia are all examples where mining developments are seen as key economic drivers for the various communities in these provinces.

North of 60 also has experienced positive socio-economic benefits. For example, in the Northwest Territories, the diamond mines represent between 36% and 41% of the territories' gross domestic product and provide direct and indirect employment for some 8,000 people, many of them aboriginals who provide services to these mining operations.

In Nunavut, Meadowbank is an example—and there's a picture there—of the positive socio-economic contributions to the region. As many of you may know, Prime Minister Harper saw this firsthand during his northern tour not too long ago.

So the benefits from mining are significant and the impacts go far beyond the mining site itself. For example, Sudbury, Ontario, is an example of the socio-economic benefits of mining, showing how a cluster can benefit from mining. These benefits can include building infrastructure such as roads, railways, schools, community centres, health centres, and so on. Mining also provides some of the highest-paying jobs and generates other indirect and induced employment opportunities.

The next slide is just a map that depicts some of the northern economic development potential.

As I mentioned previously, there are opportunities to diversify the minerals and metals activity in the north. Currently some 48 mining projects are undergoing environmental assessment in Canada and 14 of these are located in the territories, representing somewhere between $7.5 billion and $8.5 billion in investment.

If these projects are realized, they will double the number of full-time jobs in the territories and, as you can see from the map, the new developments will diversify the commodity base to include commodities other than diamonds—which I spoke of already—to things such as gold, iron ore, zinc, lead, rare earth elements, et cetera. These are clusters which, if infrastructure were provided, would obviously benefit these mining developments, similar to, for example, the transmission line in northern British Columbia.

● (1540)

[*Translation*]

Of course together with these opportunities, there are also some challenges.

[*English*]

As I said, mining is a key economic driver for northern communities, but there are some challenges that go along with it. Addressing the challenges is essential to unlocking the resource potential. Projects are often located in remote areas where access to things such as labour, power, roads, railways, and ports is limited. Investing in infrastructure, such as education, skills, training, and regulatory improvements will facilitate mining developments and also promote other economic activities.

As well, outstanding land claims—again, talking about some of the challenges—contribute to uncertainty and investment risks. These risks, along with withdrawals of lands for conservation, have created some concerns by industry. There is work under way by federal governments related to land claims and land use planning that should improve the current situation.

Skill shortages are obviously not isolated to northern development, but given the population and education levels in the north, these shortages are fairly significant concerns, particularly if communities are to benefit from the economic development opportunities these projects present.

The regulatory processes vary in complexity and tend to be seen by industry, at times, as unpredictable, costly, and time-consuming. As well, the federal government is moving to devolve responsibility. This also creates some level of uncertainty. However, work is under way to improve the regulatory system, with the creation of CanNor and the northern project management office.

Lastly, geoscience investments are an important aspect for long-term success.

[*Translation*]

Canada's North is resource rich with significant potential. This potential will attract direct foreign investment. Natural Resources Canada works closely with other federal and territorial governments and other stakeholders. We have several programs focused on the north: geoscience; science and technology related to mineral development; regulatory and environmental improvements. Realizing the north's potential will require a focused effort to turn risks into opportunities.

[*English*]

With that, I'd be happy, along with my colleagues, to try to answer any questions you have.

The Chair: Thank you very much for the presentation. It is very much appreciated. It was a good quick overview that I'm sure will spawn some questions.

We will go directly to questions now. The first round is seven minutes.

We'll start with the Conservatives and Mr. Trost.

Go ahead, please.

Mr. Brad Trost (Saskatoon—Humboldt, CPC): Thank you, Mr. Chair.

Thank you to the witnesses for coming today. I have to say, your picture of Meadowbank actually made my day today, because I worked there eleven years ago on the mineral deposits, doing field geophysics. It looks different from when we were fending off a bull muskox to get some of our survey work done. It's good to see that the project came to fruition.

When you're dealing with mining companies going anywhere in the world, one of the big things is regulations, the ease of doing business, and things of that nature. While I'm not aware of where it ranks, for example, in the Fraser Institute report, it's very important to make sure that companies can come in and know where they're at and where they're going.

Could you give a more detailed description of what you're doing on regulatory reform and things to ensure the ease of business, and some of the specifics you're doing to make the process for approving the mines in the north better and quicker, without compromising any of the necessary safeguards? Could you provide as much specificity as you can?

The Chair: Mr. Arora, go ahead.

Mr. Anil Arora: Thank you very much.

First, I'm glad that you can relate to that project with your personal experience in the past. Again, that speaks a little bit to the history that all Canadians have with the natural resources sector and mining. You don't have to look too far before you can point to somebody you may know who is working in the industry, which is a good sign, I think.

You're absolutely right. The regulatory environment that we have in Canada is often cited as one of the biggest challenges, especially when you're talking to foreign investors. And when we look at the north, it just makes it that much more complicated, because we are in the process of devolving the responsibilities north of 60 to essentially where the system is south of 60.

So I'll speak specifically to north of 60. If you look at the three territories themselves, in Yukon back in 2003 we devolved those responsibilities, and there is essentially one entity that investors can go to when trying to get the necessary approvals to proceed. Similarly in Nunavut, with the land claims well in hand, there's one entity that companies can go to for, if you like, approvals and so on. I'll ask Ginny to get into a little bit more detail on the various elements.

In the Northwest Territories, there are some 13 boards that get involved in various elements from surface rights to land use planning, water, land use, and other aspects. So, absolutely, it is a bit more complicated, and given the devolving structure it just takes a little bit longer to get that balance between the environmental protection and treaty rights, where that is applicable, to allow aboriginal people to get involved and benefit from the development and, obviously, the economic potential.

With that, I'll ask my colleague Ginny to give you a little bit more detail in each of the three jurisdictions, if I may, Chair.

● (1545)

Mr. Brad Trost: You're about three and a half minutes in.

Mrs. Ginny Flood (Director General, Minerals, Metals and Materials Policy Branch, Department of Natural Resources): Okay, I won't go into too much detail, because it really is an area that Aboriginal Affairs and Northern Development is responsible for, but, obviously, at NRCan we have a real interest in that and have actively participated in it.

With respect to the streamlining, much of the area we're working on with Aboriginal Affairs and Northern Development is through the establishment and creation of the Northern Project Management Office. The intent of that office is to look at having a one-stop shop for industry coming in, and a better sense of how to navigate all of the regulatory boards and the types of permits required. It's very similar to south of 60 and the Major Projects Management Office that was established in 2008. It is a little bit different in the sense that the Northern Project Management Office is really there to help guide the proponents through the regulatory system. It will have very similar processes as far as project agreements are concerned in helping to look at some of the predictability and the certainty needed by industry. Certainly operating in the north has its challenges, one being the very short season there. So the timing of decision-making will be key for a lot of the industry.

So that is one initiative that applies to all three territories.

The other area we're working is land use planning as part of the land claims. We are actively engaged in that and, hopefully, through that exercise, we will see an improvement in the regulatory area, because we will be able to identify those areas that are going to be more at risk, and then by looking through that lens, we'll be able to identify more quickly with industry where we need to develop new processes and approaches.

Mr. Brad Trost: From what I'm hearing, devolution tends to be the way and seems to have worked pretty well in the Yukon—but maybe we'll deal with that one later.

Is there a rough timeline or estimate for when that is going to be completed in the NWT and in Nunavut, or are they not quite as eager or prepared? Also, you mentioned there are 13 boards, et cetera, in the NWT. Has some thought been given to consolidating and streamlining that process?

You have about one minute.

Mr. Patrick O'Neill (Director General, Explosives Safety and Security Branch, Department of Natural Resources): I believe there was an agreement in principle signed between the federal government and the Government of the Northwest Territories. I believe the territories' intention is to conclude devolution negotiations within a 24-month time period.

With respect to the 13 boards in the NWT, I believe Mr. John Pollard was appointed chief federal negotiator to work with first nation communities to see whether they could consolidate the number down to one board. I think there was a bit of a question mark around the ISR region, the Inuvialuit situation, because although it seems to be a workable model, there are efforts under way to look at reducing the number and complexity of that regulatory regime.

● (1550)

The Chair: Thank you, Mr. Trost.

We go now to the NDP and Monsieur Gravelle for up to seven minutes.

Go ahead, please.

Mr. Claude Gravelle (Nickel Belt, NDP): Thank you, Mr. Chair.

And thank you for being here.

You touched very briefly on the Ring of Fire. I'd like to know what kind of effect the geomapping has on the Ring of Fire, or maybe even vice versa: what effect does the Ring of Fire have on geomapping? What's the benefit for the environment and our first nations?

Mr. Anil Arora: First, as a government, one of the things we do is to make sure that the scientific base of the whole country, in terms of the geology and its potential, is available for all to invest in. A number of the finds you see are a direct result of the investments the government has made. There are a couple of specific programs you may have heard of. One is the geomapping for energy and minerals, which is a $100-million initiative that the government has put in place; and the other one is a targeted geographic initiative, which actually looks at existing bases and ask how we can actually exploit more or use more tools to even get more.

A number of the recent finds are a result of the investment the government has made in geoscience, and in geomapping specifically. There's a formula that says every dollar we invest in geoscience results in $5 in terms of exploration activity, and $125 in terms of its downstream impact on jobs and so on. So in many respects we are unique in the world, in that we actually do this kind of thing and then we make it publicly accessible for all companies to be able to use that information and generate the kind of economic activity we want in the country.

Specifically with regards to the chromite deposits and the finds within the Ring of Fire in northern Ontario, it certainly is an example where geomapping has resulted in what will become one of the richest chromite deposits in the world. It obviously has to go through, and is in the process of going through, the various aboriginal consultations as well as the various environmental assessments. We want to make sure—all of us do—that this is exploited in an environmentally responsible way and sustainable way that presents obvious benefits to all Ontarians and, for that matter, all of Canada.

We work very closely with the Government of Ontario to make sure this occurs and that any kinds of issues that are in play, in terms of the environmental assessments and so on, are properly assessed.

Maybe with the chair's indulgence, I could again ask Ginny to provide a little more detail on that.

Mrs. Ginny Flood: I'll just talk a little bit about the aboriginal front.

We are doing some work in the Ring of Fire on the aboriginal front just to make sure that the aboriginal communities do benefit. As Anil said, the environmental assessment process, obviously, will look at the environmental impacts and at ways of mitigating them.

So we will also be involved in that area.

Mr. Claude Gravelle: A while ago you touched on the $100 million over a five-year period for geomapping. Can you break that $100 million down and tell us who is getting how much and for what?

Mr. Anil Arora: My colleague, Brian Gray, is expected to appear in front of this committee. You'll get a more fulsome answer from him on the processes that are in place to work with provinces and territories, in terms of where that money gets targeted and where it makes sense—where it has the biggest potential, if you like. I think you'll hear him say that the north is a vast territory and that 60% of it, for the most part, is not mapped to the same level of detailed geology as the south. Certainly, a number of initiatives are in play to try to find, if you like, the haystacks, and then once we find the haystacks, then it's industry and others who try to find the needles within those haystacks.

I'd like to defer more details about how that amount of money is being divvied up between the various areas that show the most geologic potential, if you like.

● (1555)

Mr. Claude Gravelle: Mr. Chair, can we make sure that Mr. Gray has the breakdown when he comes in front of the committee?

The Chair: We can ask for that.

Mr. Claude Gravelle: Thank you.

What is the current status of the program's development and findings to date?

Mr. Anil Arora: Once again I'll ask that the question be posed to Brian. He can certainly tell you where things are financially, where they're looking at potential, and the kinds of relationships they have in place.

I'd rather leave that to him, because it's his area of direct responsibility.

The Chair: You have one minute.

Mr. Claude Gravelle: Are there other locations where Natural Resources Canada is using seismic testing in the Arctic?

Mr. Anil Arora: Again, it's not my area specifically that handles that, so I would defer to his expertise in that area.

M. Claude Gravelle: Thank you.

The Chair: Monsieur Gravelle is finished.

We'll go to the Conservatives again and Mr. Allen for up to five minutes.

Go ahead, please.

Mr. Mike Allen (Tobique—Mactaquac, CPC): Thank you, Mr. Chair, and thank you to our witnesses for being here.

I'm from New Brunswick—obviously not a northern area—where we are seeing a lot of development and potential development now. So some of the questions I'm going to ask will try to compare processes a little bit.

One of the things mentioned during the presentation on participation in the review was technical, scientific information, like acid rock drainage, and that type of thing. Just how extensive is your warehouse of scientific information on the various impacts of different mining operations? Importantly, how is this information used to support projects or project applications? Is that information available to just projects in the north, where the federal government would have jurisdiction, or would it also be available as part of the environmental impact process for projects in New Brunswick and other provinces as well?

Mr. Anil Arora: The short answer is that we do have quite a rich base to draw from. We use that to assess new projects as they come along—not just individual projects, but the cumulative effect of several projects in a particular area.

We play a lead role in working with provinces and territories on a number of pretty important initiatives. You mentioned the MEND project looking at the impact of acid drainage over time. We work with our provincial colleagues and use that information from one project to another, so our scientific base is always updated with the unique information of various projects. So whether it's in New Brunswick, or Alberta, or Saskatchewan, or up in the north, that repository of information is available to our colleagues and industry as far as best practices are concerned for reducing the production of acid drainage, and for the monitoring and control of it.

We also play a leadership role in the national orphaned and abandoned mines initiative. It's another example where we cooperate and collaborate with our provincial and territorial colleagues in trying to deal with some of the legacy mines. They're the abandoned mines, where companies were responsible for particular projects back in the forties or fifties, before such initiatives as putting up bonds for reclamation of mines, and so on, were put in place. The companies may have gone out of business, or whatever.

Again, there's a rich repository. We take a lead role with our colleagues in an initiative to find best practices. In fact, international communities have looked to us to replicate the MEND and NOAMI projects within their own areas.

● (1600)

Mr. Mike Allen: If you have information on, for example, something like tungsten mining or anything like that.... I would assume that if proponents were going to be in a province, they would enter into an environmental impact assessment through that province, and then we would support it federally in whatever way. I'm assuming that some of this information might come into play as part of that environmental impact assessment process.

Mr. Anil Arora: My colleagues are eager to jump in.

Mr. Mike Allen: I see that.

Mr. Anil Arora: So I'll let them.

Mr. Mike Allen: I'm excited that both of them want to jump in.

Mrs. Ginny Flood: You're absolutely right. It doesn't really differentiate what province we're in. We provide two different aspects. In one case, we could actually be a regulator, and so we would be providing advice based on our regulatory responsibility related to the Explosives Act. Within that, we also have a role as the federal authority, based on expertise. We would be advising other departments, such as the Department of Fisheries and Oceans, Environment Canada, Transport Canada, and others in their decision-making on the impacts and the ways to reduce the impacts of mining activity on the environment.

We are also engaged in discussions on mine design, ensuring that we have the best practices in play, as well as on mine closure. In Canada right now, in order to avoid getting into contaminated sites and abandoned mines, we look at mine closure. It is a key area that needs to be part of the front end of the process, not the back end. So we actually put a lot of effort into that, as well.

The Chair: Mr. O'Neill, you wanted to respond as well.

Mr. Patrick O'Neill: Yes, I just wanted to enunciate the areas we do comment on. As Ginny said, there is the actual mine engineering, and there is geology; explosives; mine effluents; minerals and metals science; permafrost, which is primarily a north-of-60 issue; hydrology; seismology; and glaciology, as well. We have an extensive knowledge base to bring to bear.

Mr. Mike Allen: Thank you.

The Chair: Thank you all.

We go now to the next questioner.

Mr. Harris, you have up to five minutes.

Mr. Richard Harris (Cariboo—Prince George, CPC): Thank you, Mr. Chair, and thank you, presenters, for your very interesting input.

We're pretty much focused on what referred to as minerals in your presentation. In gathering information, does Natural Resources extend it to other types of earth materials that can be mined, such as specialized quarry rock and things like that. Do you identify those, as well as areas where you would find zinc or copper or gold or iron?

Mr. Anil Arora: Yes, we do indeed look at gravel and quartzites and different types of materials in two ways. One is when we are involved in looking at the resource potential of a particular area—let's say an input towards defining what might be conservancy areas or parks and so on. We do a full assessment that takes into account the whole gamut of what might have economic potential and that needs to be considered in those processes.

Second, as was discussed earlier, where we bring into play either a regulatory role or a federal expertise role, once again, we certainly take into account the economic potential of the full range, if you like, of the minerals and metals that are present.

● (1605)

Mr. Richard Harris: All right.

I don't know if someone asked the following question. I'm curious about how many indirect jobs are created as a result of one mining job. If the question was asked, I apologize, but I missed the response.

Mr. Anil Arora: I think that's an excellent question.

In Canada, I think if you go back to 2010, 308,000 people overall were involved directly in mining, and that's from the start to the downstream aspects. There have been some estimates that for every direct job, there are at least another two, if not three in some cases, indirect jobs created, whether they're in the financial sector; the legal sector; construction; or the catering, for example, that goes into a mine camp; roads, or water; and so on. It is a significant multiplier of employment, indeed.

Mr. Richard Harris: I wanted to ask where our minerals go. I know they're refined to a certain extent in Canada and then shipped out in a purer form to buyers, I think, primarily in Asia right now—except for the diamonds, of course, which may go somewhere else. Please correct me if I'm wrong.

Is that our major market for minerals from Canada's north right now?

Mr. Anil Arora: From all of Canada—

Mr. Richard Harris: From all of Canada.

Mr. Anil Arora: —our minerals tend to head south to the United States. So it certainly remains a very significant market for most of our materials. However, with the emerging economies, we are seeing more and more diversity, if you like, in terms of markets. We're seeing expansion to markets such as China, and to a lesser extent to India. Certainly, we still have good markets for a number of our materials in Europe as well.

Mr. Richard Harris: The last question I think I have time for is about foreign investment in our mining. I know for example there's a mine up in Yukon called Yukon Zinc, which recently had a large investment from a Chinese company—or from the Chinese government indirectly, I guess, through a Chinese company.

How much of a stake is a foreign country or a foreign company permitted to take in a mining project in Canada?

Mr. Anil Arora: My colleagues from Industry Canada look at the Investment Canada Act and do the final determination, and it's the minister, through the Governor in Council, who decides ultimately. As you're aware, there are limits on investments. Investments that exceed those limits are subject to a net benefit test. For non-WTO countries that limit is $5 million. For WTO countries, according to WTO rules, the limit this year is about $312 million, and any investment that exceeds that amount must undergo the net benefit test.

There is only one exception, and that is uranium, for obvious reasons. Essentially, for all other minerals, the net benefit test is applied. As we have discussed, there are some real advantages to Canada from that foreign investment.

Mr. Richard Harris: Thank you very much.

The Chair: Thank you, Mr. Harris.

We go now to Monsieur Lapointe for up to five minutes.

Go ahead.

[*Translation*]

Mr. François Lapointe (Montmagny—L'Islet—Kamouraska—Rivière-du-Loup, NDP): Thank you, Mr. Chairman.

Would it be possible to obtain charts showing an itemized breakdown of export markets, to see where we are with regard to the Americans, Indians, Chinese and Europeans? Would that be possible?

Mr. Anil Arora: Yes. I don't have that with me, but we could provide you with that.

Mr. François Lapointe: In addition, could we have a breakdown of investors? For instance, what is the proportion of Asians, Canadians or Americans? Would that also be possible?

● (1610)

Mr. Anil Arora: Yes, but I am not sure whether that is my exclusive responsibility. I will check. I may not have all of those figures, but—

Mr. François Lapointe: That could give us some parameters.

Mr. Anil Arora: It would certainly give you some idea.

Mr. François Lapointe: The figures don't necessarily need to be accurate to the nearest million dollars.

My next question concerns what we see on the slide, where it says "Future Northern Economic Development". On the map of northern Quebec, although it says "Future Potential" and "Anticipated Projects" to the side, there is nothing at all. How come?

Mr. Anil Arora: The map is focused on areas north of the 60th parallel.

Mr. François Lapointe: Yes, but one part of Quebec meets that definition.

Mr. Anil Arora: As you know, we are working with the Government of Quebec on developing the potential that exists in northern Quebec, with the Plan Nord more specifically. This is a big investment that also comes with big challenges. As you know, there is a lot of potential in northern Quebec.

Mr. François Lapointe: Would it be accurate to say that there is assistance available for prospection in the large lots discovered by Natural Resources Canada? Could that be expressed in that way? If not, would it be a mistake to put it that way?

Mr. Anil Arora: As I mentioned earlier, there are two programs specifically: GEM and TGI, and we work with the Government of Quebec to invest and have a better idea of the geology and its potential, etc.

Mr. François Lapointe: Would it be possible to obtain more specific figures for northern Quebec and all of the territories so that we could see how this is allocated everywhere?

Mr. Anil Arora: Of course, and this again falls directly under my colleague Mr. Gray's responsibility, and he will be—

Mr. François Lapointe: He will be there?

Mr. Anil Arora: Yes.

Mr. François Lapointe: He will be able to tell us about the breakdown and tell us how all of this is invested.

Mr. Anil Arora: Yes.

Mr. François Lapointe: Afterwards, once this prospecting assistance is dispensed, is there a limit? Is it then up to private enterprise to continue with its own prospection, as I would expect? You don't actually dig the hole for them.

How are these standards set? Who has determined what role Natural Resources Canada plays, and at what point do we tell the private sector that it is up to it to carry on with prospection?

Mr. Anil Arora: That is an excellent question. As I mentioned, our role as a government is mainly to provide geoscience expertise, for instance regarding maps, or geology, at a level that is acceptable to everyone. That however is only the beginning. To get a better idea of the potential, private industry must invest.

As you know, in Canada we have a venture capital fund that is the biggest in the world in a sector... in Toronto, for instance, we have the TSX venture capital fund. It is something that increases prospecting activity everywhere in Canada, even in Quebec.

Mr. François Lapointe: [*Inaudible—Editor*] this is not due to the funding.

As for infrastructure, in order to make it possible to get into some of the more remote areas such as those found in northern Quebec—the Quebec government recently announced a $1.4 billion funding package for a single road to make the north more accessible—how will the levels of responsibility be determined? Because this sort of activity can require a lot infrastructure, like landing strips.

Mr. Anil Arora: Yes, as you mentioned, I think the Government of Quebec has invested $2.1 billion, together with a group which will be responsible for governance, for the way in which this money is used.

Mr. François Lapointe: And what is the federal responsibility in all of that?

Mr. Anil Arora: As with most of our agreements, there are of course discussions among the governments to find a way of investing together.

Mr. François Lapointe: And so the infrastructure needed in order to get into the more remote parts of the north are the subject of negotiations, discussions.

Mr. Anil Arora: Yes. This is once again something my colleague from Transport Canada, and Industry Canada can—

Mr. François Lapointe: He would be in the best position.

We got a reply concerning a potential agreement among 13 Northwest Territory councils. I believe that Mr. O'Neill referred to a model—the Alouette model—which could be used as an example. What is that potential model like?

[*English*]

Mr. Patrick O'Neill: The board's structure north of 60 is a function of the comprehensive land claims. To the best of my understanding, the chief federal negotiator who was appointed had to initiate a round of consultations with first nation groups. It's something they negotiated with the federal government at the time of their claims to come to a more streamlined model.

I believe my colleagues at Aboriginal and Northern Affairs Canada would be better positioned to give you an update, because they're working on their northern regulatory improvement initiative.

● (1615)

[*Translation*]

Mr. François Lapointe: Perhaps I didn't understand you well through the interpretation, but you referred to a potential model and I believe I heard you say that it is called "Alouette". What are you referring to exactly?

[*English*]

Mr. Patrick O'Neill: In the Inuvialuit settlement region, the ISR, they have their own environmental assessment regime. Most people in industry, particularly the oil and gas industry, would comment that it's a much easier system to navigate. It has its own reasons for that, whether it's the first nations' perspective toward development or issues like that, but it seems to work better, to my understanding.

[*Translation*]

The Chair: Thank you, Mr. Lapointe.

Mr. Lizon.

[*English*]

Mr. Wladyslaw Lizon (Mississauga East—Cooksville, CPC): Looking at the map on page 6 of your presentation, it looks as though there is big potential for further exploration and development of minerals that have not yet been tapped into.

Can you expand on what impact this will have on the north, and is there an estimate of the number of new projects that can be developed there?

Mr. Anil Arora: To say today that we have a really good picture of the overall potential of the north would be premature. As I was saying earlier, something like 60% of the territories in the north don't have the level of detail in terms of geoscience as we do in the south. Now we're doing something about it. We will be investing $100 million over the next decade or so to try to bring it up to the same level.

As I said, that's going to provide the private sector with the kind of information it needs to look at to see where the prospects are. You can already see where there are some prospects. We have a vibrant diamond industry.

Through Baffinland and L'Anse aux Meadows, we're seeing the exploitation of Mary River, a huge iron ore deposit. We are looking at investment somewhere in the $4 billion to $6 billion range on a project that will last 100 years. It's going to look at the kinds of investments in ports and infrastructure and vessels and so on.

My feeling is that this is the future for Canada. It is an area where we're going to put a lot more emphasis to learn about the geological potential. And then with the kind of investment in infrastructure and other things, how do we turn that geological potential into economic potential? I think we're just at the beginning of knowledge in this area.

But as you can see, and as I was saying earlier, 14 out of the 48 projects under way are in the north. I think it shows the kind of interest in the north and the desire to do some more detailed work in the north and to explore and exploit the potential there.

Mrs. Ginny Flood: I can add to that. I'll just give you the example of the Meadowbank project. It's about 340 jobs, a 10-year project that's worth about $457 million. A number of other projects are coming in the longer term. Mining projects range in size, but that's a fairly average project.

Mr. Wladyslaw Lizon: Because these projects are in the north, there are challenges that don't exist in many parts of the world, including many parts of Canada. It's a vast area.

You were asked about where we sell the products, but I will ask how we ship the products.

A question was asked about the infrastructure cost. Do you by any chance have any estimates as to how much the infrastructure development for these proposed projects would cost different levels of government or, really, the taxpayers, regardless of which coffer the money comes from?

● (1620)

Mr. Anil Arora: Again, it really does depend on each project. Take, for example, Mary River, the one I mentioned earlier on Ellesmere Island. This is a massive project, a very rich deposit. It's probably the richest deposit in the world, both in terms of quality as well as quantity.

We're talking about this company investing in a new class of ships that are going to be able to break through the ice all year round and come into the inlet, and then in an efficient way being able to transport that bulk material to Europe, for example. You have some very interesting infrastructure. Building railroads on permafrost and keeping that kind of railroad going all year and trying to keep it from sinking, if you like, are the kinds of challenges there are. Every project has its unique characteristics. In this case it's going to be the private sector, for the most part, that invests in this kind of infrastructure.

Where we see a cluster of individual projects, where there's no business case for industry to be able to do that, that's where governments are going to have to start to look at it. We have examples of that, for example, in northern B.C., or what we're talking about in the Plan Nord or the Ring of Fire. Governments look at the benefits of investing that make an entire suite of projects economically viable as opposed simply to being geologically viable, because of the returns to us in revenues and royalties and taxes and so on.

As for trying to come up with a figure for the entire north, it's a bit premature. I think we have to look at it in a clustered way—and that's where we are. In fact, at the last energy and mines ministers' conference, there was agreement among ministers to start to look at the clusters around the country, at how we go from this geologic potential to economic potential. That's the kind of work we're doing.

The Chair: Thank you, Mr. Lizon.

Mr. Wladyslaw Lizon: Are we out of time? Is my time up?

The Chair: You're finished. You're toast.

Mr. Wladyslaw Lizon: I'm toast, okay.

The Chair: As in, *fini, finito*, but good try.

Now we go to Madam Day, for up to five minutes.

Go ahead.

[*Translation*]

Mrs. Anne-Marie Day (Charlesbourg—Haute-Saint-Charles, NDP): Thank you Mr. Chairman.

My first question concerns page 2 of your document. You talk about sustainable development in the far north. I would like you to define what you mean by sustainable development.

Mr. Anil Arora: I apologize, but could you repeat the question?

Mrs. Anne-Marie Day: Yes.

On page 2 of the document, in the first line of the first paragraph, you say that Natural Resources Canada contributes to sustainable development in the north. And so I am asking you how you define sustainable development.

Mr. Anil Arora: Of course, the term "sustainable" is quite subjective; the word "sustainable" does not define all of the concrete aspects or measures involved.

By and large, the intent is to have a project that will ensure a balance between economic potential and environmental repercussions, and provide future opportunities for the communities, which will be able to derive benefits from these projects for a longer timeframe than that offered by mines, for instance. If we invest in infrastructure, it will stay in place much longer than a mine would. We can also invest in workers' education, which is also something that will last much longer than a mine.

So we want to invest in a sustainable way in this type of project and there are examples of them everywhere.

Mrs. Anne-Marie Day: So the investments that will be made there will be like a legacy you will be leaving to future generations.

I would like to ask you a second question. You talked about the possibility of a railway being built right on the land. We know that the permafrost is fragile in the far north.

What are the technical challenges you face in building a solid structure, one that will endure without damaging that part of our planet?

● (1625)

Mr. Anil Arora: There are certainly challenges with regard to our projects in the north, that's a fact. In our laboratories, we work with the communities, industry, and the territories and the provinces, of course, in order to find solutions to minimize and even eliminate negative impacts. Thanks to technology, we have examples of cases where alternatives were found. We invest in projects with industry.

In our sector, there is a project known as the Green Mining Initiative. Ten million dollars have been allocated to projects with other stakeholders to find ways of minimizing negative impacts. We are making progress currently.

Mrs. Anne-Marie Day: What are the challenges?

Mr. Anil Arora: As we already mentioned, among these challenges are water quality, impacts on biology, on organisms; how to reduce the amount of energy that is needed to break down rocks; waste reduction, etc. As I already said, we have come up with some very interesting solutions.

I will give you the example of a project that was carried out in Sudbury, but the concept can be applied elsewhere. They combined the waste from a mine to that from the city of Toronto, for instance, in land that had not been used before; afterwards, they grew plants to be used in the production of biofuel. In short, they used two types of waste in a field that had never been used before and thus had little value, and this led to something concrete that we will be able to use to reduce energy consumption.

Mrs. Anne-Marie Day: You said that exports derived from the development of our natural resources were mainly to the United States, but that there were developments involving China and Europe in this area.

Could you tell us—and I am not asking you for an exact figure if you don't have it to hand—what percentage of these resources stay here in Canada to be processed and have value added?

Mr. Anil Arora: Of course, we process several products in Canada. I don't have the exact figure. The fact remains that we are a part of a free market and that in that context it is up to industry to determine if that is really worthwhile. We have also carried out studies. Where copper is concerned, we have determined that it is more profitable for Canada economically speaking to only do the mining extraction, and not do the rest, the subsequent processing. The case was not exactly the same for all of the minerals. We work with industry in order to find ways of adding value to resources here in Canada. We have managed to do so in certain situations.

Be that as it may, you are correct: in many cases we can't process the products either because of the cost of energy, the cost of labour, transportation, infrastructure, and so forth.

● (1630)

The Chair: Thank you, Ms. Day.

[*English*]

Mr. Calkins, please go ahead, for up to five minutes.

Mr. Blaine Calkins (Wetaskiwin, CPC): Thank you, Chair.

This is very interesting. I'm new to this committee, but I've spent a lot of time on the fisheries and the environment committees, and so I want to talk to you about a few things.

I'm an Alberta guy. I appreciate the fact that we have jurisdiction over our own resources there, very much so. I'm not going to go down that road, but I understand a lot of the problems when it comes to economic development, sustainable development, exploitation, and so on. Sitting on the environment committee for as long as I have, I constantly hear from various officials. I get it, whether it's an infrastructure project in my constituency or a mining development in the constituency, whether it's for coal-fired electrical generation, whatever the case might be. The regulatory process for environmental impact assessments is sometimes the bottleneck when it comes to getting some projects done and off the ground in a timely fashion.

You mentioned in your opening remarks that timeliness in the north is critical. We have two seasons in Canada: we have winter and the construction season. I'm going to ask you straight up how long these regulatory processes take. For example, if a new diamond mine were going to pop up some place up in the north, from start to finish, what are we looking at insofar as a timeline to get the various permits in place is concerned, to get this thing up and off the ground so that investors can see some results? What part does your department play in that process?

How has your department...? I'm not going to ask you to assess the capabilities of other departments; I don't think that's fair. But do you see any ways of streamlining or improving these things so that we can get both results we're looking for: the protection of the environment, but at the same time the economic opportunities that come with mining and exploration?

The second question I have for you is this. As I say, I grew up on a farm in Alberta. I can't tell you how many times we've had an oil and gas company come across and do a seismic test on our farmland. Now, of course, they don't share that information. One company does not share the information with another company; it's proprietary information. They may be looking at different depths, et cetera.

One hundred million dollars sounds like a lot of money, but not when you take a look at the vastness of the Canadian north. What is $100 million really going to tell us about where the various prospects are for metals and mining and so? How much of the repository of information is that going to fill up, in particular, where there are some voids or lack of knowledge right now?

And what does industry give back to us? Does it pay for that information? Is it publicly accessible information? When industry goes out and does any of its work in lieu of or on top of the information that it gets from the Government of Canada, does it provide any information back to us? Are there any agreements when it comes to sharing this information, or is just simply that we provide the service to industry and it goes about and does what it wants to do and we never hear from it again?

Mr. Anil Arora: First of all, it's nice to meet a fellow Albertan.

Your questions are numerous, and I'll try to answer them. My colleagues, I can tell, are jumping to get in there too.

First of all, you asked whether there is a set formula for how long a project takes from start to finish. Every project is unique and distinct according to its location. Unfortunately, natural resources occur where they do; and we have to go to them rather than the other way around. If there's plenty of water around, that poses a problem. If there's no water around, that poses a problem. Obviously, we've talked about infrastructure, weather, and availability of energy. All of those things play a unique part in the government's assessment, if you like, and the weighing of the economic potential with all of the various environmental and socio-economic impacts that go into realizing that project.

The way our system works is that the provinces own the resource and make the decision about whether they want to proceed or not. It's when that project hits specific elements of the federal government's responsibility that we get involved. Whether it's navigable waters, fish and fish habitat, or explosives that are going to be part of that particular project, it's when those triggers get hit that a series of processes come into play. Depending upon the impact the project will have, we have three categories of the degree to which we're going to do that assessment: it could be a review; it could be a comprehensive study; or it could be a full panel review. There are three grades of assessment, depending upon—

● (1635)

Mr. Blaine Calkins: Who decides that?

Mr. Anil Arora: There are some strict criteria in terms of the level of impact. We can certainly get into a little bit of the criteria for each of them.

Essentially that's our trigger. We, as governments, can play a direct role as per the responsibilities ministers have, where they have a regulatory function and actually have to give an okay for something to proceed, or where we, as a federal department, are going to provide expertise, such as the kinds of scientific and other expertise we've talked about.

Yes, it is a complicated process, but we want to make sure that we get the balance between the economic, the environmental, and the social aspects right.

There are many times when the economy dictates how long the project will continue. These projects are highly capital intensive, and in many cases, they'll start in a particular cycle. They may have to put the projects on hold until their investors come back onboard. Typically—and I'm being very out there—a project may take about four or five years from the time they see the potential to the time of the permitting actually going ahead.

Now, Natural Resources Canada has taken on the lead role through the creation of something called the Major Projects Management Office. In the north, north of 60, there's an equivalent structure called the Northern Project Management Office, where they've set a target of halving that time.

Mr. Blaine Calkins: You're working on your service-level agreements based on an increase in revenue.

Mr. Anil Arora: Exactly.

Mr. Blaine Calkins: That's where I'm trying to go with this.

Mr. Anil Arora: Within the federal family, right at the highest level, the deputy ministers sit together once a month and go through every single major project that's on the slate, and they ask some very tough questions, all the time respecting the authorities within the Canadian Environmental Assessment Agency, or the National Energy Board, or the CNSC. Those authorities are still there. This is more of a coordination role. But certainly, Natural Resources Canada understands the importance of timing. It understands the importance of making sure that these projects don't face any unnecessary delays.

Now remember, provinces have their own processes that go on top of these, because they ultimately are the owners of the resource. It's only where the triggers come into play.

The Chair: I am going to have to cut off this back and forth.

Mr. Calkins, if you want to pursue it later, we're about halfway through our question time, so there is a good chance that we'll get back to you.

I go now to Madame Gravelle...Monsieur Gravelle—

Some hon. members: Oh, oh!

The Chair: —who has, I believe, one question maybe, and then we will go to Monsieur Lapointe.

I had a bit of a brain freeze there.

Mr. Claude Gravelle: I just want to assure the chair that Madame Gravelle is in Nickel Belt, nowhere near Ottawa, and she doesn't look a lot like me. She's much prettier.

I have one question, and I want to share my time with Mr. Lapointe.

There was much controversy in 2010 over the government's plan for seismic testing in Lancaster Sound. Communities were worried not only about the effects of seismic blasting on marine life, but also there was the perception that the government was mapping oil and gas deposits within an area that was supposed to become a marine conservation area.

In December 2010, Minister Baird announced that all testing had been cancelled. Can you tell me if there are any current plans for new tests? And if there are, what measures have been taken to protect the marine life, and what consultation has been conducted with communities?

● (1640)

Mr. Anil Arora: Unfortunately, it's not in my area of responsibility for two reasons: oil and gas falls under my colleague's responsibility, and when Brian Gray is here, again, I think he could answer your question in terms of the seismic work that's under way and the kind of consultations they did with the communities and the follow-up to that. I'm just not aware of it. If I were I'd be happy to share it. I'd rather my colleague do that.

Mr. Claude Gravelle: Okay.

The Chair: Thank you.

Monsieur Lapointe.

[*Translation*]

Mr. François Lapointe: Thank you Mr. Chairman.

I believe it was Ms. Flood who raised the concept of

[*English*]

the closing of mining would be at the front end of the process. If I understood what you said, it was something close to that.

[*Translation*]

In actual fact, how is the cost of closing a mine assessed? Is it the responsibility of Natural Resources Canada to do so and to hire the evaluators? I understand the principle. However, how is that included in the exploration costs, the dividends, and so on?

[*English*]

Mrs. Ginny Flood: I won't go into much detail, but for the most part—

[*Translation*]

forgive me, I have to speak in French.

Mr. François Lapointe: If it is going to be quicker in English, I can use the interpretation, that's okay.

Mrs. Ginny Flood: No problem.

As for closing a mine, we really follow the advice from industry, from the sector, and the proponent.

However, there are often consequences on fisheries, navigation or other areas. In those specific cases, we try to come up with a plan to compensate the fishing or shipping industry. That is part of the closing plans.

That said, the responsibility of closing mines really rests with the provinces. However in the case of mines north of the 60th parallel, the Department of Aboriginal Affairs and Northern Development has that responsibility.

Mr. François Lapointe: It is that department that sets the standards with regard to the costs involved in closing mines? Are they the ones who have to determine the anticipated costs? Is it up to the provincial government or the territories to establish that when such and such mine is closed, the real costs should be such and such an amount?

Mrs. Ginny Flood: I am going to pass the question on to Patrick.

[*English*]

Mr. Patrick O'Neill: I'm familiar with the regime north of 60. Before a mine gets permitted at the front end, the mining proponent has to prepare and submit a mine remediation and closure plan to the environmental review board. That is done by the proponents, and usually involves third-party engineers who have to sign it off. So their accreditation as professional engineers is at risk if the material isn't up to a satisfactory level.

That is usually tabled in the public consultation process, where it can be peer-reviewed by others in the community or detractors of the development on the opposing side. Those mine-site remediation and closure plans use prevailing third-party costs associated with certain projects and certain aspects of the project, so they come up with a very market-linked price tag to return the project to a pre-mine state.

Once that remediation and closure plan is accepted, you usually post financial bonds for reclamation security. In the case of north of 60, they are held by the Department of Aboriginal Affairs and Northern Development Canada. They are supposed to cover the full cost of reclamation of the site.

We're trying to avoid the experiences we had with previously contaminated sites. There are some in the north that are quite famous now. There's a Treasury Board policy that the taxpayer is not to pay the freight costs associated with cleaning up closed mines, abandoned mines, and those sorts of thing. That's all done at the front end.

In the case of the diamond mines, they are ISO-certified companies, so they're probably among the best operators in the world. Even in those cases they have posted hundreds of millions of dollars in reclamation security.

● (1645)

[*Translation*]

The Chair: Thank you Mr. Lapointe.

[*English*]

Mr. Anderson is next for up to five minutes.

Mr. David Anderson (Cypress Hills—Grasslands, CPC): Thank you, Mr. Chair.

We talked a little about the jobs that are already being created in the north, and some of the indirect jobs as well. Has the department done any work on the future employment demand that's going to be created in the north? It seems that it's going to be substantial. Are we part of any planning? What numbers are they looking at in five or ten years from now, in terms of what the demand might be?

Mr. Anil Arora: With the known set of projects there, we're looking at about 8,000 or so immediate jobs created in the north. When you look at the population in the north, that's a fairly significant number of additional jobs, not to mention the downstream jobs in the rest of Canada that will be created, whether to manufacture the kind of material that's going to have to be shipped, or the kinds of support services that will have to accompany those additional jobs. That's with the known set of projects, so as the number of projects starts to increase, the demands on the labour force are only going to increase further.

These are some of the best-paying jobs in all our sectors. Of course, there's a whole range of jobs, right up from local construction-related jobs on the mine site. So there's a profile of jobs that comes with the start of a project to its construction, and then to its steady state. That profile will change and vary depending upon the length of the project.

Many of the local communities have taken us up on opportunities to train the local workforce. Colleges have set up small mobile camps, for example, to train people for various trades on-site. That comes back to the question about these being durable jobs, with skill sets that go beyond the shelf life of a mine.

Mr. David Anderson: On the responsibility for that, is it a mixed bag of Natural Resources, INAC, the territories, and the provinces? Is there no set order for creating those jobs and putting the training in place for those kinds of things?

Mr. Anil Arora: We work with our provincial and territorial colleagues and those at Aboriginal Affairs and Northern Development Canada to make sure that development programs are in place for these trained individuals, certified individuals in some cases in the trades. We work with them on a whole host of training and certification programs, as we do in other sectors, of course.

Mr. David Anderson: On the third page of your presentation, one of the core federal responsibilities is navigable waters management. Is there a role for NRCan in navigable waters management, or are you talking about DFO here? I ask because there's a certain ambivalence in many areas of this country to DFO.

Mr. Anil Arora: It's mainly DFO, with Transport Canada. When we become involved with an environmental assessment, we will certainly look at various aspects of that. But the main responsibilities rest with them.

Mr. David Anderson: When we look at the north, what is the real potential? You have diamonds down as being, I guess.... I don't know if they're developed a little further than some of the other resources or if there actually are far more of them than any of the other resources. But what would be the other biggies in the future? Are they zinc and lead, or gold, or uranium? Where does the potential seem to be?

Mr. Anil Arora: Right. It's something we struggle with all the time: what is the ultimate potential of the north? As the geoscience becomes available, we'll know more. And as industry starts to explore more, we'll even find increased potential.

But from what we know today in terms of the pipeline in the near term, precious metals such as gold certainly are...and diamonds, of course. We see that already. The known diamonds have a shelf life of maybe another 20 years. If we could find more kimberlite pipes and other deposits, we could extend the life of those.

I think there's a real challenge for us to diversify and substitute, as I was saying earlier, what in the Northwest Territories constitutes just under half their GDP at the moment. There's a real pressure, if you like, or incentive for us to look at other deposits. But we're looking at zinc. We're looking at lead. We're looking at silver. We're looking at cobalt, uranium, iron and, as I mentioned already, copper. The potential is there for diamonds, precious metals, base metals, and also rare earths.

● (1650)

Mr. David Anderson: You talked a little bit about that. China basically controls it. But where are we at in the stage of development of rare earth minerals and in being able to really develop that industry?

Mr. Anil Arora: Certainly. Rare earths are a bit of an oxymoron; rare earths in fact are not that rare.

There are two types of rare earths, light rare earths and heavy rare earths. The light rare earths are actually geologically present in many parts of the world, and they occur with other deposits that we see. The heavy rare earths are used in magnets, for example, that go into powering motors, such as for our little windows in cars or the big windmills you see that require the huge magnets, and so on. Those types of rare earths are, indeed, rare. They're in short supply. And they're in high demand from countries such as Japan, Germany, and the United States, because of their applicability in new forms of energy, whether in defence applications or in the automotive sector or in the electronic sector.

Canada has at the moment about 100 projects under way to try to find these rare earths. Many of them are for the light rare earths, but several of them are for the heavies. There are about four projects that hold some real prospect in the north for these heavy rare earths. So it certainly holds well for us to try to play a role.

I don't think we're ever going to be the primary player or play a huge part in the world's quest for these rare earths, but I think we can be a player in the future. And industry is responding to the geoscience that exists out there already. Industry is taking advantage of some of the real returns on our investments in gems, for example. And we've seen, as I said, at least one of those projects looking at actually coming into production in 2014-2015.

Again, I think this holds well for Canada going into the future. We can enter a market that we haven't played in at all.

The Chair: Thank you, Mr. Anderson.

Mr. Trost.

Mr. Brad Trost: Thank you, Mr. Chair.

One thing occurs to me, and I think we should probably be asking ourselves this question, but I'm curious to see if the department deals with it as well. Do you systematically sit down and ask yourself what the impediments are and what we have to work on? If you haven't, why not?

If you have, what are the three or four biggest obstacles to developing the north? The list could go on forever, but from what the department has looked at, what in your mind are the major obstacles to developing it? Are they investment rules, the labour force, just basic geology and geomapping? Give me your big three, four, or five. What is it that's holding things up, what do we need to work on and what do we need to look at here on this committee?

Mr. Anil Arora: Thank you for that question.

Indeed, we do think about it, and the minute we stop thinking about it, because we have such a good network with industry and with our stakeholders and so on, they certainly remind us that we ought to be thinking some more. So rarely does a day go by when we don't think on our own part or get prompted by others into thinking what the real challenges are for us to use that enormous potential that we have and to turn it into real value for Canadians.

I think you hit on a few of the challenges already. Specifically regarding the north, the main thing we think about is the lack of infrastructure. For example, many of these projects are very energy intensive at various stages. We don't exactly have ready-made energy that's available. Trucking diesel up there or flying diesel up there is very expensive. There's a short season, which is certainly a huge cost driver in any project. So we are focused on seeing how we can diversify the sources of energy—for example, to geothermal or wind sources. Again, in those conditions we're talking about, the same rules perhaps don't apply and the kinds of knowledge we need and the kinds of challenges we face always present new things for us.

Just very quickly, the other challenges obviously include the timing of the regulatory process. As was mentioned earlier, there are only two seasons. So if we miss something by a month or two, potentially a whole year could be lost because you can't ship material up there afterwards.

There's also the lack of infrastructure. Diamonds are easy; you can put them in a briefcase and off you go. It's a little more difficult with iron ore or zinc, or whatever you have, and if we don't have the roads or the railroads or whatever, that's a real problem. It comes down not only to who is going to pay for those but also how you sustain them in the kind of climate and unique conditions that are there in the north.

You hit on the labour force as a challenge. There are always pros and cons of whether companies should fly people in and create a camp or use the communities, and so on.

● (1655)

Mr. Brad Trost: Okay, I think I got probably the big three.

Let me put it to you in a slightly different way. Those are the major ones we have to deal with. Do you actually look at what are the major policy impediments or questions you have to ask? That's a slightly different question. I'm wondering if you would answer that one.

Mr. Anil Arora: Absolutely. As was mentioned earlier, there are some things that are clearly in the provincial domain, and there are some things that are shared. So from a policy perspective, we're always looking at how we achieve one project, one review. How do you still balance the needs of the environment, the needs of the communities, the needs of economic growth, and still make sure we have a timely process?

Again from a policy perspective, how do we ensure that the labour force is going to be there when it's necessary and can withstand the kind of downturns and upswings in the industry?

Again from a policy perspective, we consider the availability of the kinds of energy downstream that we look at. How do we weather what is still very much a cyclical industry? How do we ensure that we have a robust investment climate, the kind of structure we are unique for in the world that can gain the kinds of capital that go into these relatively high-risk investments?

So from a policy perspective, the whole range of these concerns is certainly a preoccupation of ours.

The Chair: Thank you, Mr. Trost.

We go now to Madame Day for up to five minutes. Go ahead, please.

[*Translation*]

Mrs. Anne-Marie Day: I would like to come back to a few points. You said that the transfer of responsibilities in the Yukon had gone well.

Could you tell us more? Does that mean that agreements were concluded with local populations?

You also said that Nunavut was...

What are the obstacles you encounter?

Mr. Anil Arora: In fact, you are making a favourable assessment of the state of negotiations and agreements that are the responsibility of our colleagues from the Department of Aboriginal Affairs and Northern Development Canada.

As we were saying a bit earlier, the level of maturity is different in each jurisdiction. For instance, we work with the Inuit, with associations and existing structures, but I think that my colleagues would be in a better position to provide you with some further details.

● (1700)

Mrs. Anne-Marie Day: So the main difficulty is to arrive at an agreement with the local populations.

Mr. Anil Arora: That governance system did not exist even a few years ago. The point is to see how we can develop the capacity to foster competencies within a system, so as to balance existing tensions.

So we are talking about capacity, about a governance system and of course the necessary resources and analyses. There are quite a few issues, but as we saw in the Yukon, we can make progress quite quickly.

Mrs. Anne-Marie Day: You said local workers would be hired. So there will be ad hoc training, since many of these workers are not specialized or only have elementary schooling.

We are talking about 8,000 short-term jobs. Will these 8,000 jobs be entirely staffed by local residents or will you have to import workers?

Should there be migrants from the south who go to work in the north, how will all of this work out? We are talking about two seasons.

Mr. Anil Arora: The 8,000 jobs are everywhere and each project is unique. It will depend on where the minerals are found and where workers are available, because there aren't enough communities everywhere.

As you said also, the level of competence varies. Some companies took the initiative of training people themselves. There are many examples of companies who invested a great deal in the training of workers. In our sector, we are currently the biggest employer of aboriginal people in Canada. There has been an increase in that regard.

[*English*]

Mr. Patrick O'Neill: Certainly north of 60 in Nunavut, as part of the Nunavut Land Claims Agreement, there's a requirement for IIBAs. These are Inuit impact and benefits agreements that cover things such as job opportunities within the mine operations, and also touch on training and development. It's a formalized process that's part of the land claim.

There are some 160 IIBAs or MOUs across the country, whereby the mining industry is entering into formal agreements with local communities. A lot of mineral potential is within 100 kilometres of a first nation community, and the industry is addressing the interest of those communities to get engaged in the sector. In many cases, industry is are specifying the number of hires it will make in a community. I think, as Anil said, the mining sector is the largest employer of aboriginal people in Canada and some 60,000 jobs need to be filled over the next 10 years. They're certainly looking for local people to fill those positions.

[*Translation*]

Mrs. Anne-Marie Day: Today, during question period, the issue of the ozone layer was raised. We know that in the far north, they use mostly diesel fuel. With development, that use will increase even more. You referred to alternatives, to wind energy in particular. The fact remains that the use of diesel will increase as well as the risk of pollution and problems related to the ozone layer. A thinner ozone layer means that workers may suffer the consequences, such as skin cancer among others. That means that there will be social costs and health costs involved. We are talking about workers who are going to have to agree to work under such conditions.

Given this new problem, are you doing research and development to position yourselves and find solutions? What is the situation currently?

● (1705)

Mr. Anil Arora: Of course, that is a reality. But there are also some strict standards concerning waste, air quality, and so on. Because of these standards and the fact that in some cases, there is no real alternative, several projects will not go forward. We are not going to lower our standards to further development. The standards are there, whether we are talking about air or water quality, the safety of workers, etc.

So certain projects will not see the light of day. From time to time, when solutions considered within the context of a project are deemed unacceptable, the governments reject that project even if it has positive economic aspects.

The Chair: Thank you, Ms. Day.

[*English*]

We go now to Mr. Allen for three minutes, if you could.

We've reached an agreement, I think, to take about 10 minutes for future business at the end of the meeting.

Mr. Mike Allen: Okay.

The Chair: So if you could go ahead, I think you have three colleagues who want to ask questions as well.

Mr. Mike Allen: Thank you, Chair.

The questions I want to ask are associated with your map on page 7 of the current and proposed protection in the Northwest Territories.

What does this map mean? Is this map the only one available for the north of 60 area? Are the same types of maps available for other parts of the country, including the provinces? Can we get a map like this for the other territories? Do you lay your potential future areas for development over these protected areas to determine just what your process is going be going forward in terms of how things will be developed in those areas?

Mr. Anil Arora: Your question is whether there are maps with the areas delineated as such south of 60. The answer is yes, those maps are available.

And to your second question of how one balances these with the resource potential of an area, my department and sector participate in a process—a MIRA or resource assessment—that looks at the mining and energy potential of an area when government decisions are made about setting aside particular areas for parks, or for the conservation of a particular species, or what have you. We certainly take part in that process.

We do a full assessment of current and future potential. It is ultimately the responsibility of the Minister of Aboriginal Affairs and Northern Developmentto consult with our department and Parks Canada and others before a decision can be made that an area is off limits, if you like, to further exploration.

Mr. Mike Allen: If I heard you correctly, then these maps are available for the other provinces as well? Would it be possible for you to table those with the committee?

Mr. Anil Arora: I am just mindful of....

Which department would we refer that to, Patrick?

Mr. Patrick O'Neill: We can certainly get the one for Nunavut. The Nunavut Planning Commission is undergoing a large regional planning process to come up with the colours that you see here, the areas that would be open for development and those that would be closed. It would be a bit of a treasure hunt to come up with all of the provincial maps, but they must exist.

● (1710)

Mr. Mike Allen: I asked because I'd be interested in them in regard to northern Quebec, and for some of the other provinces, including New Brunswick.

It makes me wonder. I would expect that because of jurisdictional issues, that might be a partnership between Natural Resources Canada and the provinces, and maybe the geomapping outfit or some other facility within NRCan is responsible for coming up with these.

Mrs. Ginny Flood: There are various maps around and we'll check for them. Environment Canada is doing a lot of land use planning with a number of provinces that are interested in that, so they probably have some.

We'll check and verify that those maps are available.

Mr. Mike Allen: That would be wonderful.

Mrs. Ginny Flood: I'm not sure they overlay the resource potential, though, but would very much be for protected areas.

Mr. Mike Allen: Fair enough. Thank you.

The Chair: Thank you, Mr. Allen.

Mr. Lizon, for about three minutes.

Mr. Wladyslaw Lizon: I want to continue with the earlier question I was going to ask.

We were talking about the challenges of infrastructure and transportation. For the proposed projects, especially when it comes to metal ores, whether it's iron ore or copper, are there some plants planned in the proximity of the mine that would refine the product? Instead of shipping the raw product, the iron ore, are they planning on refining it on-site before shipping it out?

Mr. Anil Arora: Generally, no. Especially in the north, you generally wouldn't see the kind of infrastructure required to put up a plant or the kind of energy required to operate a plant of that nature. Many companies have smelting and refining facilities in other parts of Canada, and it's a business case for them to look at where it makes sense to do that. In some cases they do ship the product to Newfoundland or various other parts of the country. In other cases, given the infrastructure, there is no business case for them to do so, in which case the raw material is shipped out. We do play in the free market.

I do know that some provinces have said, and others are thinking about saying, that if you find something, it has to be refined within the same province. Some provinces have put on some restrictions. There are pros and cons to putting restrictions on where the product can be processed.

Mr. Wladyslaw Lizon: That was quick. Thank you.

The Chair: All right.

I'll go then to Monsieur Lapointe for about three minutes.

[*Translation*]

Mr. François Lapointe: Thank you, Mr. Chairman.

I asked earlier whether it would be possible to provide a recent study on the cost of closing a mine in order to see how the matter is handled. Would there be a relatively recent study available, one that does not go back 15 years, for example?

[*English*]

Mr. Patrick O'Neill: My understanding is that the Ekati diamond mine in the Northwest Territories has somewhere between $240 million and $280 million in posted security. That could be in a bond, a promissory note, or that kind of thing—but essentially it's a claim against the company. It's still under way.

Another thing I would like to clarify is that most modern reclamation and remediation regimes have built in this idea of progressive reclamation. As a company is winding down its operation through its life cycle, it undertakes the work as it goes, if you will, so that the final price tag associated with closing the mine after production has stopped is less than its full potential cost. It would be very different for proprietors to walk away from a project mid-production; you would have maybe a $300 million price tag. As they wind down their operations, they may only have $60 million left and they will do that as part of their corporate and social licence to do another project.

[*Translation*]

Mr. François Lapointe: In other words, there is no available report describing a complete cycle. There is no document we could consult setting out how closing costs were assessed and how a mine closure was managed.

● (1715)

[*English*]

Mr. Patrick O'Neill: No, you can access the documents. Again, I can only speak to my experience, but certainly in the process in the Northwest Territories and Nunavut, all of the documents associated with those environmental assessments are posted on their web pages, and you would be able to find estimates of mine site reclamation through those organizations. As well, though the NOAMI process that my ADM spoke about earlier is slightly different, it would have estimates of the costs associated with governments having to take control or management of an abandoned site and to deal with reclamation. So they are available.

[*Translation*]

The Chair: Thank you, Mr. Lapointe.

[*English*]

Mr. Calkins, and finally, Mr. Anderson.

If we can wrap it up in four minutes or so, that would be great.

Mr. Calkins for three minutes.

Mr. Blaine Calkins: Mr. Chair, I think I have an outstanding question from my first round that is still to be answered. It's about the agreement. We, the Government of Canada, invest; we have this information in our systems; we provide it for the private sector. What do we get back as taxpayers for that investment other than the obvious economic development that ensues?

My second question is about your information systems. With the Government of Canada going forward with its open data, open information initiative—and not only that, but also consolidating government information systems from the current widespread and massive number of information systems we now have—how is that going to affect the information systems you have? I'm assuming you're using GIS technology for all of your mapping, and so on, and I'm wondering what the effect on that will be.

Also, could you explain to me the royalty structure? If you're collecting on behalf...how does that rebate system work with the territorial governments? I'm curious as to how that works. What departments and what agencies are involved, and is there some way we could get some clarification on this?

If you could do that in four minutes or less, that'd be great.

Mr. Anil Arora: Yes, yes, no, no, maybe.

Some hon. members: Oh, oh!

Mr. Anil Arora: Essentially, I'll answer your question about geoscience and our data banks and so on. The geoscience information is public, and so it is very much in the public domain —and we, in fact, do it so that companies can use it. It's one of the unique features of this country that we actually do, making it available for anybody, to stimulate investment.

I'm going to ask Ginny to try to answer your first question, and we'll see if there's time for the royalties question.

Mrs. Ginny Flood: I believe the outstanding question was on the regulatory side.

South of 60, the Major Projects Management Office has timeframes within which it works. Once a proponent brings in a project description, and it's fully acceptable and departments have acknowledged they have to make a regulatory decision, the process will take two years. The Canadian Environmental Assessment Act was just amended, and for comprehensive studies, they have reduced that timeline even further, I believe, to one year. So there are fairly stringent timelines. That being said, the clock can stop if proponents don't provide the necessary information as they go through the process.

As to your other question about the different decision-making and who makes the decision on what type of environmental assessment there will be, that is based on the legislation. There is a law list that decides which projects has a comprehensive study versus a screening level study, and then the Minister of the Environment undertakes whether there will be a review panel or not, based on public interest and the environmental impacts.

The Chair: Okay.

Be very brief on royalties.

Mr. Patrick O'Neill: I'll quickly deal with geoscience and royalties.

One dollar in public geoscience usually generates four or five dollars in private sector spending, because you're usually going from regional scale mapping to project specific mapping, which is like a 1:50,000 ratio as opposed to 1:250.

In terms of what obligation companies have to disclose their work, again, most provincial as well as territorial mineral tenure regimes have a requirement for the company to post its geoscience findings to keep its claims in good stead, if you will. So there is a fair degree of disclosure. Clearly, if you're a competitor, you have to go data-mining, but most mining recorders' offices have those reports if they are submitted.

In terms of royalties, the federal government, through Aboriginal Affairs and Northern Development, does collect royalties based on the value of production for both diamonds and gold. In Meadowbank I think the transfer from the federal government to the NWT was in excess of $1 billion. I think maybe $300 million in royalties was collected. Aboriginal Affairs and Northern Development collects the royalty, which is submitted to the Receiver General and then gets paid out through equalization payments, and those kinds of things.

The only direct calculation we do north of 60 is for the claimant groups that have settled a comprehensive land claim. There is a resource revenue-sharing calculation that's prescribed through their respective comprehensive land claims.

● (1720)

The Chair: Thank you very much.

Thank you all for what I think was a very informative and helpful first meeting.

I'm going to suspend the meeting for about a minute to go in camera.

Anyone who isn't eligible to be here in camera, I ask you to leave.

We will come back and do a short meeting on future business.

[*Proceedings continue in camera*]

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