Deloitte.

Equation IXI and

Winning Formula for Business Success in Northern Quebec

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Equation Nord



Perseverance



Business advice



Risks



Costs



Winning Formula for



Business Success in

Northern Quebec

Background

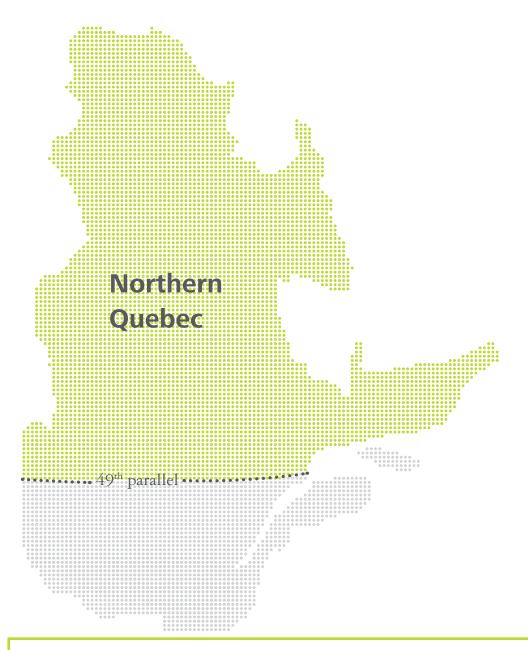
Northern Quebec offers unique economic potential with its considerable high-quality natural resources. In the past few years, Quebec and indeed the world has turned its attention to this vast territory in part thanks to the promotion efforts of the various levels of government, but especially because of worldwide growth in the demand for base metals. Accordingly, northern development has intensified significantly, and the sheer scope of the projects announced or underway holds out the promise of many business opportunities for entrepreneurs and investors.

However, key business players and stakeholders have yet to flock to northern Quebec given the numerous risks and challenges involved in expanding into this immense territory. A company planning to invest in northern development must make an informed decision after carefully assessing the business risks and gaining a thorough understanding of the challenges to overcome. For any type of organization, this requires a complex business strategy and meticulous planning, along with patience and a healthy dose of courage.

This report stems from a series of interviews and exchanges with stakeholders from various sectors involved in the development of northern Quebec, such as energy, mining, finance, human resources, Aboriginal rights, infrastructure and sustainable development, with whom Deloitte discussed its point of view. It is the result of a process aimed at identifying the regional economic development issues in northern Quebec, the challenges awaiting investors, and the solutions for local companies.

"The winning equation for businesses looking to expand into northern Quebec is the sum of much resolve and sound business advice."

Michel K. Landry, Partner, Financial Advisory and national leader of the Deloitte Equation Nord initiative



A brief history

The development of northern Quebec is not something new. Just consider the Manic-5 generating station and Daniel-Johnson dam, or development of James Bay beginning in the early 1970s and which is now in its fourth phase of construction. The North has always been at the heart of Quebec's economic development.

Launched in May 2011, Plan Nord was an economic development program for the regions north of the 49th parallel involving public and private investments on the order of \$80 billion over 25 years. The Plan, which included mines, renewable energy projects and

transportation infrastructure, was focused on sustainable development and aimed to create and consolidate 20,000 jobs a year for its entire duration, while protecting 12% of the 1,200,000 km² territory by 2015, all with the consent of the local Aboriginal communities.

The new version, called *Le Nord pour tous* [the North for All], calls for \$868 million in public funding over the next five years for infrastructure development, including the construction of roads, provincial parks, social housing and multifunctional centres in northern Quebec.

Economic conditions

Fluctuating global markets

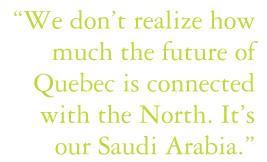
Although we are currently seeing a decrease in commodity prices in the global marketplace, sooner or later, the natural resources sector will bounce back. "It's inevitable given the world's growing wealth and the emergence of middle classes across the globe," according to the Honourable Pierre S. Pettigrew, Deloitte's executive advisor on international affairs.

"Resource demand will firm up again considerably and we run the risk of shortages if we stop investing because of the drop in metal prices." Mr. Pettigrew adds: "From 1980 to 2000, the natural resources sector was in very bad shape. Today, the situation is completely different. We are in an upward cycle that should last until the end of the decade, despite the correction we are seeing at the moment, which is a normal occurence in such a cycle."

What is the situation in Quebec? According to columnist René Vézina: "For years, we lost out on our resources and it was high time that Quebec became more demanding. The problem doesn't come from the increased demands, but rather from Quebec's mixed messages and hesitation."

The Quebec government's Mining Tax Act, which was adopted later than expected and amended twice in three years, may curb the appetite of foreign investors, without whom many mining projects couldn't get started in Quebec. One such project—the largest of its kind in Canada—is the one developed by Toronto-based Adriana Resources Inc. in Lac Otelnuk.¹ The iron mine project, which is currently at the resource definition stage, is estimated at \$13 billion and the main funder is Chinese company Wisco. "When a Chinese investor decides to invest \$10 billion in a project, it has various options," says René Vézina. Australia, a major global iron producer and Quebec's largest iron ore competitor, has lowered its mining royalties forecast at the start of the third quarter owing to China's economic slowdown. According to Mr. Vézina: "Quebec isn't the only jurisdiction with the resources; the competition is global!"

In what is one of the key points of the annual global survey of mining executives conducted by the Fraser Institute, the report notes that: "They (executives) are pessimistic about short-term commodity prices; they expect nearly level or reduced prices for silver, copper, diamonds, coal, zinc, nickel, potash and platinum, with only gold expected to increase in value significantly. In the longer term, miners expect stable or moderate price increases."²



René Vézina, journalist, blogger and columnist with *Les Affaires* newspaper and 98.5 FM radio in Montreal.



Exponential development

According to René Vézina: "We don't realize how much the future of Quebec is connected with the North. It's our Saudi Arabia." Numerous opportunities arise from the needs created by mining projects. "Suppose you are founding a new country. Your imagination is your only limit," says René Vézina. India, Indonesia and China are already consumers of Quebec's natural resources and other investors are also coveting our land. France, which has sent delegations over to explore the territory on a number of occasions, could be one of the players to develop those opportunities, particularly in the engineering and telecommunications sectors. Furthermore, the Secrétariat au développement nordique [Secretariat for northern development] will play a major role representing Quebec abroad to attract new capital. Mr. Vézina believes that Quebec (like Australia) has an advantage in the global economy in that it is a common law jurisdiction. Not all countries offer such stability: "Some countries do not have as good reputations. Let's make sure we do not harm ours."



Global ranking of the best places in the world for mining investment

2008 - 2009	2010 - 2011	2012 - 2013
1. Quebec	1. Alberta	1. Finland
2. Wyoming	2. Nevada	2. Sweden
3. Nevada	3. Saskatchewan	3. Alberta
4. Alberta	4. Quebec	4. New Brunswick
5. Newfoundland and Labrador	5. Finland	5. Wyoming
6. New Brunswick	6. Utah	6. Ireland
7. Chile	7. Sweden	7. Nevada
8. Manitoba	8. Chile	8. Yukon
9. Saskatchewan	9. Manitoba	9. Utah
10. Ontario	10. Wyoming	10. Norway
11. Utah	11. Southern Australia	11. Quebec
12. Nova Scotia	12. Greenland	12. Nova Scotia
13. Sweden	13. Newfoundland and Labrador	13. Saskatchewan
14. Finland	14. Botswana	14. Greenland
15. Yukon	15. Yukon	15. Southern Australia

^{*}Source: Fraser Institute, Survey of Mining Companies: 2012-2013.

Degrees of difficulty

Northern Quebec can be likened to an emerging country in terms of project development. As there are gaps in the infrastructure required to deliver goods and services and attract skilled labour, adapting is the name of the game.

"To build a business model, you need to address unavoidable challenges like remoteness and have a good understanding of the geography and of the Aboriginal nations," according to Deloitte's Louis J. Duhamel, Consulting Partner. "By heading north, you add complexity to your business model."

Remoteness represents one of the main challenges for those wanting to do business in northern Quebec. Daniel Laprise, president of Maisons Laprise, knows a thing or two about that: "It can be very costly to forget a part. Most of the time, there are no local suppliers, be it hardware stores or other. If we lose a bolt, we have to fly it in at a cost of up to \$1,000," explains Mr. Laprise, who was building houses in Kuujjuak well before the creation of Plan Nord. For the homebuilder: "You have to do as much as possible in the South and then transport it up there, (...) project logistics in the North are very complex." For example, to adapt to the remoteness constraints, Mr. Laprise's business model, which is based on the Habitaflex prefabricated house concept, enables the company to respond to the growing demand for mine worker housing by producing a fully-integrated folding house. Although mining companies represent a new

market for Maisons Laprise, the company remains prudent and maintains a diversified clientele given that northern market development ebbs and flows with the price of natural resources.

A business that wants to expand its operations in the North must carry out an in-depth feasibility study considering that the risks there are greater than in the South. For example, due to skilled labour shortages, a business model must include ways to attract qualified personnel and help them settle in the North, in addition to organizing work schedules to allow employees to return home for days at a time if family settlement is not an option. "Workers from the South must also be motivated to go work in the North," says Louis Duhamel. Planning must therefore include additional recruiting, infrastructure, transportation, salary and benefit costs.

Is it better to be close to the resources or to the clients?

Over and above the remoteness issue, the logic behind setting up business in the North must be sound. Only a rigorous feasibility study can answer this apparently simple question, which raises other questions such as: "Is my project's supply chain between the North and South overly extended? Should I bring suppliers with me? These questions add complexity to the business model," explains Louis Duhamel.

As Plan Nord was on the drawing table, ore prices were on the rise and the decrease in U.S. energy demand could not then be foreseen. Although economic conditions do not determine the value of a project, they do highlight

"Businesses are encouraged to move north and develop long-term projects that will create jobs and wealth for both the North and South. That must be part of the equation."

Louis J. Duhamel, Partner, Consulting, Deloitte

the importance of planning for the long term and carrying out projects with a good dose of patience. Companies must adapt their business models to seize opportunities in the North and create alliances and strategic partnerships, especially with Aboriginal communities. To do so, they must make sure they have the proper support, without losing sight of their initial mission and vision.

Not all municipalities in the 1,200,000 square kilometres covered by the northern development plan are in the same economic situation. Building successful and sustainable business models in the North, whether in the primary resource or secondary processing industries, is something of a challenge. There has been some success, but it is still guite limited.

In short, if a company's market is not in the North then there must be some benefit for it to locate its facilities near the resource, as doing so requires much adaptation. "It is misguided to take advantage of incentives, which might lead a company to drop certain conditions for success from its business model, only to justify job creation and investments in the North," according to Louis Duhamel. Furthermore, the northern economy will have to diversify beyond the natural resource sector to create wealth. Tourism and training could be increasingly developed to foster worker recruitment and retention, among other things. In the long term, new potential might arise from the energy sector with biomass, wind, and wave or tidal power.³ And as there can be no northern development without infrastructure, the construction and engineering sectors will also be called on to develop business in partnership with Aboriginal companies.

Factors influencing the business model

- ♣ Nonexistent or inadequate road, airport or marine infrastructure
- ♣ Access to skilled labour, which is easier to do in major centres
- ♣ Workforce training
- Access to attractive municipal infrastructure (hospitals, schools, services, entertainment, etc.) to foster employee retention
- ♣ Availability of goods and services suppliers to support project flow and workers' everyday needs
- ◆ Social acceptance within municipalities and Aboriginal communities
- **★** Geography
- **+** Climate
- **◆** Volatility of commodity prices
- **◆** Energy transportation
- **★** "Newfound" U.S. energy independence, leading to surpluses in Quebec

"Don't be afraid of change."

Daniel Laprise, President, Maisons Laprise

The three pillars

Although most people tend to associate sustainability with environmental issues, this management strategy is based on two other fundamental pillars: economic development and social acceptability.

A company that manages to balance these three pillars will have more business opportunities, find it easier to obtain financing, and create wealth. In short, companies that buy into this management philosophy will open up a world of opportunities and protect themselves against certain risks.



Seeking stakeholder engagement

In northern Quebec, sustainability is no longer an option; it's a necessity because the success of a project depends on its social acceptability, one of the pillars of sustainability. Without the approval of the affected communities, municipalities, citizens and First Nations, it can be almost impossible to execute a project. In brief, a company that properly integrates the social side into its projects will development more partnerships and business opportunities that will result in lucrative projects. Milla Craig, Deloitte Sustainability Leader for the Quebec region, advises businesses that are seeking investments: "More and more, obtaining capital requires that management engage with stakeholders and be transparent because, no matter what, information today is disseminated on social media. That's another issue that ups the pressure in every respect."

The CEO of Virginia Mines, André Gaumond, firmly believes that integrating First Nations "right from Day 1" allows the company to evolve its exploration projects more easily and in a context of mutual respect: "We go and see them directly, and ask to meet with the 'tallyman,' the village trapper, and his family. We explain what kind of exploration work we want to do and where we want to set up camp. We also ask them to refer two Aboriginal workers we can hire—preferably someone from their family."

The economic value of a good reputation

Economically speaking, the return on sustainability investment can be measured. Even though some points remain intangible and cannot be calculated in dollars and cents in the short term, there are tools that make it possible to evaluate the ROI of a sustainability-based business model. They include tools like the ones developed over the last five years by International Finance Corporation⁴ in cooperation with Deloitte: "In the course of large mining projects, over a life cycle of 15 to 20 years, these tools make it possible to assess the financial impacts of certain investments such as local workforce training or environmental investments that go beyond regulatory requirements, specifically in terms of protection against risks," explains manager Gildas Poissonnier, Deloitte Sustainability and Climate Change. "These are indispensable tools that can be used to better assess risk and seize related business opportunities." For example, in its 2012 Annual and Sustainability Report, the Fonds de solidarité FTQ issued sustainability guidelines for its specific investments in the mining sector. 5 This is a very tangible sign of the times that demonstrates to Quebec businesses that sustainability is now a must.

The CEO of Virginia Mines confirms the importance of being a good corporate citizen: "When it's time to obtain financing and the Caisse de dépôt et placement du Québec, the Fonds de solidarité or the banks are doing their due diligence, they look to see whether there's social acceptability risk, environmental risk, and litigation risk." This is the stage when companies in search of financing are rated: "A good reputation can make it easier to obtain financing, improve our conditions, and maybe get us a better interest rate," according to Mr. Gaumond. Companies that invest in sustainability find opportunities resulting from positive differentiation and competitive positioning. For Virginia Mines, this positive impact took concrete form when it sold its Éléonore deposit to Goldcorp mining company in 2005. The transaction has earned it advance payments of \$100,000 a month since 2009 up to a maximum of 50 months before start of production at the mine.⁶ Needless to say, this agreement was made possible because both companies share the same sustainability values and apply them to their operations. For Mr. Gaumond, "a good reputation is worth its weight in gold."

Green reporting helps lend credit

Project feasibility and economic development often depend on social acceptability, which in turn is achieved through environmental compliance. When it comes to environmental issues, reporting transparency inside and outside the company is a big question. At stake is the credibility of the company and of the mining industry as a whole. Milla Craig supports companies to ensure that their financial statements present the requisite environmental provisions for regulatory compliance with respect to site decontamination and restoration. "As well, we help companies to prepare sustainability reports or move towards integrated reports that combine a company's financial outlook with its environmental and social performance objectives," explains Ms. Craig. "The kind of credibility that is gained is really important to their ongoing dialogue with stakeholders. It's a step in the process to ensure that, ultimately, companies show that they've taken stakeholders' concerns into account and have responded to them as effectively as possible."

"What we want is a balance between economic development, the environment and social issues."

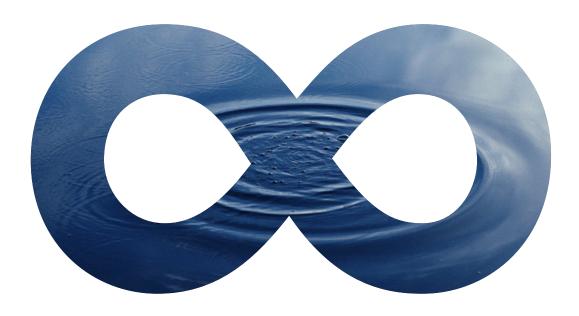
André Gaumond, CEO, Virginia Mines

If it is accepted practice for companies to be concerned with the environment, it is also very important for them to report their actions. Even during their first exploration surveys, Virginia Mines would clean up the abandoned sites it found. "When we flew over old exploration sites and abandoned outfitting operations, we'd land and pick up the rusted gas drums and whatever was lying around," recalls André Gaumond. "We'd been doing that for 20 years, before it was even documented." For the past two years, Virginia Mines has been issuing sustainability reports. It has also helped set up a fund for the restoration of abandoned sites: the Restor-Action Nunavik Fund created in 2007. First Nations are responsible for the work of this fund, which was created with investments of \$2 million from the mining industry and \$4 million from the government. First Nations also drew up a list of over 90 sites to be restored. After five years of work and \$4 million, or half of the initial budget, the 18 most critical sites have been cleaned up; over 40,000 barrels of oil were removed from the Nunavik region and recycled.⁷ According to Mr. Gaumond, these initiatives fit with the values of the new generation of geologists, who are very environmentally conscious. "When you get people to participate and the young people identify with it, that creates loyalty. They feel proud of their company because it takes care of the environment. We're geologists because we like nature. We like being outdoors and we like untamed wilderness." André Gaumond considers that, overall, even though the spinoffs from these investments are difficult to quantify, "having a good reputation brings all kinds of positive returns and allows us to retain our people."

A wealth-generating ecosystem

For Milla Craig, in considering the economic development of mining regions, "it's important to see how community engagement initiatives are more than simply philanthropic gestures that meet anecdotal demands or needs; instead, they must be integrated into a community's development and socio-economic plan." Dialogue with stakeholders is truly key to sustainable development and business opportunities. Together with community members, companies must learn to define the region's needs so they can meet them. "And at times, companies can meet particular needs with their expertise, their operational know-how or specific practices, much more than with a cheque or economic spinoffs."

Per square kilometre, a mine yields \$77 million on average, all types of ore combined. In forestry, a square kilometre brings in \$2 million, while agriculture will generate \$200,000 for the same area. According to Mr. Gaumond: "Mines represent 0.03% of Quebec's territory but account for 20% of our exports. With so little land use, we account for 20% of exports and 10% of investments. So there's a phenomenal leverage effect with the mining industry." Consequently, he believes that, to create wealth in Quebec, the mining industry has to be part of the equation, because for every direct mining job, three indirect jobs are created. Virginia Mines is an advocate for the creation of sustainable wealth. "What we want is a balance between economic development, the environment and social issues."



"It's important to see how community engagement initiatives are more than simply philanthropic gestures that meet anecdotal demands or needs; instead, they must be integrated into a community's development and socio-economic plan."

Milla Craig, Deloitte Sustainability Leader, Quebec Region

Human capital

Counting on the right employees

How do you attract and retain workers in a remote region? This is an important question for mining exploration and development companies, but also for operations in the secondary and tertiary processing industries and service sector. Strategic workforce planning becomes crucial for companies wishing to attract and retain qualified people.

Hiring employees to work in the North is a challenge comparable to that faced by international organizations, which require considerable mobility from people in certain positions and in certain regions. These companies operate sites or plants in various different countries, not all equally attractive. This reality resembles that in the North, which traditionally seems to attracts more male than female workers due to the nature of the work and working conditions. However, with the growing number of women graduating from college and university, companies will likely have to change their recruitment approach in the near future.

A wealth of human resources

In an industry dependent on the price of natural resources, changing HR needs require good planning to avoid loss of human capital. Suzanne Morin, Deloitte Consulting Partner and Human Capital practice leader, helps business leaders establish tailored approaches to hiring high-skilled workers. "There is very strong competition in the market-place for these types of skills profiles because they are so rare and hard to attract," according to this expert. "It is crucial to properly assess the company's needs and plan its workforce requirements soon enough so it can target the right talent pools and attract the best to the remote region." High-skilled workers represent a critical

segment of the workforce and require special attention. In remote regions, companies must offer attractive conditions not only in terms of salary, but also in terms of work schedules, transportation expenses and family life context. "It is harder to move families with children to a remote region given all the complexities involved for them," says Ms. Morin. "Basic services such as schools are not always accessible in the North." Therefore, each case must be negotiated individually and, to that end, a number of studies and benchmarks can be used to advise employers on determining a candidate's value and the right approach to adopt.

A case in point is Raglan Mine, which operates a nickel mine located 1,800 km north of Montreal. The mining complex is totally isolated: the closest Inuit village, Kangiqsujuaq, is about 100 km away and can be reached only by plane or, in the winter, by snowmobile. There is a sense of utter remoteness at the mine which requires some time getting used to, "Workers from the South really feel disoriented when they discover the lunar landscape strewn with glacially eroded rocks," says Marc Lucas, HR manager at Raglan mine, owned by Glencore. "Most of our employees are from Abitibi-Témiscamingue, but some are from Montreal, British Columbia, and even Mexico." The adaptation is guite different for the Inuit employees, who make up approximately 17% of the workforce. They are rather destabilized by the industrial context. Every two weeks, employees are flown home by one of the company's Boeing 737 aircraft, or by Air Inuit in the case of employees from the 14 villages spread over the vast territory of Nunavik. To assist workers while at the mine, the company has made significant efforts to help them stay motivated and healthy. In addition to the gyms that have been laid out, the HR department and recreation committee organize social events to entertain the workers. "We bring in bands and stand-up comedians every six weeks," says Mr. Lucas. In addition to activities that allow employees to relax and keep fit, psychological assistance is also available on site.

Solving the labour shortage

Although strategic workforce planning makes it possible to recruit the right people for a company's needs, employee diversity remains an important issue, especially in a mining industry that, according to Suzanne Morin, is still rather conservative and traditional. "Many companies do not necessarily have very concrete strategies to address talent diversity, particularly when it comes to hiring. Those that invest in the North will have to implement inclusive diversity strategies and adapt their corporate culture." In the face of labour shortages, especially among mining engineers, companies must rethink their approaches in order to remain competitive. "The challenges ahead of them are quite considerable," adds Ms. Morin. HR management in the mining industry needs to open up its horizons to recruiting a greater number of candidates from abroad and from the female labour pool as more women than men are now earning postsecondary degrees.8

In light of the skilled labour shortages, Aboriginal communities represent an important pool of workers that companies—especially those in the mining industry would be well advised to consider. These communities are often located near mining properties and their members are already involved in project-related negotiations. Training is something that can indeed be included in the negotiation of agreements between project developers and Aboriginal communities. That was the case with the Raglan Agreement, which was negotiated between the Makivik Corporation, the Inuit communities of Salluit and Kangiqsujuaq and the mining as part of the process to secure its licence to operate. "The Raglan Agreement with the Nunavik Aboriginal communities includes a profit-sharing clause representing total community benefits of more than \$120 million since 2004, as well as the Tamatumani training program," notes Mr. Lucas. In a context where mining companies will be setting up operations for many years—even generations—to come, these training costs become synonymous with training investments. "We help our Inuit employees to complete high school and offer pre-hiring training," confirms Marc Lucas. Moreover, to ensure sustainability, these training investments represent an asset for the company, Aboriginal communities, and governments. "When they return to their village, they possess plumbing, mechanical or electrical skills. Some even start their own business."

A mine of information for employers

After high-skilled workers have been hired, retention becomes another challenge that companies need to address proactively to ensure their human resources investments are made for both the short- and long-term. This is why a hiring strategy must always be based on future projections—as companies do not have the same needs at start-up as they do during production. It is extremely important to retain human resources and better manage changing HR needs, especially in the mining sector. In this regard, Raglan Mine Mr. Lucas confirms that the company has never considered interrupting its Tamatumani training and hiring program, despite the temporary drop in the price of nickel on world markets. "Workforce training is part of the price to pay when we commit to doing business in northern Quebec." According to Ms. Morin: "Data analytics becomes a key tool for making detailed workforce planning projections. By combining a company's historical information and market data, it is possible to match the changing workforce needs to the various required areas of expertise." In a market such as northern Quebec, where the economy is primarily impacted by natural resource prices, different approaches and concrete action plans can be established to develop recommendations that will help a company manage its growth while adjusting to fluctuations in the mining industry.

"Data analytics becomes a key tool for making detailed workforce planning projections."

Suzanne Morin, Partner, Consulting and leader of Deloitte's Human Capital practice in Quebec

Financing

A different way to attract capital

If stock markets were once considered to be a good source of financing for mining exploration companies, then public offerings are not as interesting an option today as investors are no longer as forthcoming.

To get projects started, mining companies must increasingly rely on other sources of financing, such as foreign capital, governments and financial institutions. According to Jonathan Allard, Senior Manager, Northern Development, at Desjardins Group: "Numerous investments in Quebec are being made north of the 49th parallel." Businesses and investors in many industries appear to be tapping into profits in the North. But to execute projects and bring the required investments to the table, stakeholders must first develop strategic partnerships.

Communicating your expertise

Quebec isn't the only place that has resources to offer, and although they are of high quality, the effort required to extract them can put off a number of investors. And in some cases even, especially with foreign investors, the projects are not on their radar screens. According to Tan Ong, Co-leader of Deloitte Canada's China Services Group for Chinese investments: "There's a slight distortion in Quebec between opportunities and potential Chinese investors. The fact is that not all investors in China know about the feasible projects here." A company looking for foreign capital has to get a head start since it can take twice as long to conclude a transaction for this type of financing. "You need to properly understand the culture and the decision-making process. Sometimes, things can take longer than in the West," explains Mr. Ong, who believes this is due to various factors, including communications. Furthermore, according to Tan Ong: "Mining is a very specific industry and not everyone can grasp the requirements of mining companies, as opposed to more run-of-the-mill operations, such as in manufacturing, for example." Businesses that want to venture North must be well accompanied. For Mr. Allard, the business models of projects in the North are more

complex, requiring cutting-edge expertise: "In addition to financial institutions, which are very close to their clients, accounting, law, and engineering firms will be there to provide solutions upstream. It's those professionals who have the information to help companies position themselves quickly."

Sharing the risk

Mines that want to promote their sites for development might lose an investor's support in mid-process owing to uncertainty created by market instability or the regulation environment. Furthermore, according to Mr. Ong, for reasons of profitability, "when most foreign investors, be they from India, Korea or China, come here it's because they're interested in the resources. As soon as a mine starts producing, they want to send the ore back home." As a result, directing mining companies to build processing plants in Quebec could make attracting foreign capital more of a challenge. Aside from lithium, which according to Jonathan Allard represents a safer bet for mining companies given that lithium-based projects are already on the horizon—the government of Quebec's electric transit project is one example—companies will follow through with their feasibility studies, taking advantage of government grants.9 In other sectors, such as iron and gold, foreign competitors with the same resources, such as Australia, Brazil, and several African and Latin American countries, could prove to be more attractive.

In major project financing, foreign investors are almost always part of the financing arrangement. And it is reassuring for a financial institution to know that the government is participating, namely through Investissement Québec, which provides loan guarantees: "Financial stakeholders like to see the government get involved and provide the company with a level of support," says Jonathan Allard. In project financing, several Canadian and/or foreign banks can come together and create a bank syndicate, thus financing each of their share and spreading the risk. "In some cases, one part of the financing can be ensured by Investissement Québec, and another by the Caisse de dépôt et placement du Québec," explains Jonathan Allard. But for these groups to come together, their stakeholders need to meet and information must be shared.

When reputation is paramount

To develop business and finance projects in the North, it is imperative to have an understanding of the field. It takes a special kind of approach to develop projects with small, medium or large local communities and to create companies or joint ventures with Aboriginals. "We have had to review our credit practices, among other things, to limit processing times and help entrepreneurs that take outsized risk, in an outsized environment," according to Mr. Allard. When a large-scale project is launched, it requires all kinds of suppliers and manufacturers. Many other sites spring up simultaneously as a result, particularly construction sites. "It's typical to see a company commit to a contract that is twice as large as its average annual revenues of the past 10 years." According to Mr. Allard, these companies aren't always able to maintain their operations while meeting the increased demand, which can have a tsunami-like effect on their business. "So there are many related issues. From a bank's perspective, most normally acceptable ratios no longer apply." At the same time, financial institutions cannot take undue risks and must ensure they're financing sound projects. Mr. Allard adds that reputation risk is now considered by lenders as part of their analysis: "We make sure that we're doing business with developers who have good track records and who are supported by the local communities."



"An investment from Asia isn't different than any other investment. Of course, you need to have some understanding of the culture, but aside from that, it's the same game. A business relationship is a business relationship."

Tan Ong, Partner and co-leader of Deloitte Canada's China Services Group for Chinese investments

Legislation and regulation

Calculating the benefits

The value of tax credits paid to exploration mining companies in Quebec represents an important advantage compared to the rest of Canada, despite the province's more complex tax system. It is true that Quebec offers interesting mineral potential and the development of mineral resources will certainly generate economic benefits for Quebec society.

But to create wealth, the mining industry requires more than a legislative and regulatory framework, it also needs government support to balance its budgets. Not only has the *Mining Tax Act* been amended twice in the past three years, but the hybrid tax system for mining companies can make things harder to understand for many investors. According to Bryan Coates, Vice President, Finance and Chief Financial Officer of Osisko, mining project benefits are clearly not limited to collecting company taxes: "There's more than just royalties. Benefits also include income taxes paid by employees, payroll, and regional economic development."

New leaner regime

The recent mining tax reforms in Quebec contribute to a sense of uncertainty. "The reforms have caused Quebec's attractiveness for mining projects to diminish. In fact, a number of projects have been put on hold until things get cleared up," says Lucie Chouinard, Partner, Deloitte Tax. For his part, Bryan Coates believes that the agreement on mining taxes concluded with the government is a reasonable solution. He does add, however, that the agreement results in a tax increase, which reduces mining project returns. As part of the new mining tax regime, the government is implementing progressive taxation as is the case with regular corporate tax. As a result, all miners operating in Quebec must now pay a minimum mining tax. The novelty of the minimum mining tax is that it will now be applicable to mining exploration companies, even those that haven't made a profit. According to Mr. Coates, the minimum mining tax will affect the most junior mining companies, but also marginal projects: "Because Agnico Eagle engaged in exploration activities at its La Ronde mine for several years while turning a profit on its development activities, it was able to discover a deep deposit. Such discoveries wouldn't be possible today under the new regime."

"What we need is to raise the profile of the mining industry both inside and outside the province to attract investment."

Bryan Coates, Vice President, Finance and Chief Financial Officer of Osisko

Furthermore, the new regime now includes a mine-by-mine tax calculation. "This will create issues in terms of investments and mining project investment strategies," according to Mr. Coates. "Adopting a mine-by-mine calculation means that companies will no longer be able to take profits from one mine and reinvest them in another, as was the case in the past." Gone are the days when mining companies could defer their taxes by investing in other projects. "That will have a negative impact on the investment level."

The new mining tax regime comprises three progressive tax segments, including a minimum mining tax rate of 16% on profit margins from 0% to 35%, a rate of 22% for profits over 35% and a rate of 28% for the segment designated as "super profits," i.e., profit margins of 50% and over. In analyzing the new reform, Deloitte's Lucie Chouinard found that "the surtax on super profits is something that has never been seen in Quebec." The same is true for Australia, which apparently served as the model for the *Mining Tax Act*. "Australia also imposed a royalty system with a tax on mining companies, none of which has yet paid such 'super profit' tax rates," adds Lucie Chouinard. Bryan Coates believes that the debate on mining royalties in Quebec has done a disservice to the mining industry: "The term 'super profits' itself is a source of concern to me," noting that the natural resources sector is volatile. "Talking about super profits makes it seem like earning money is easy to do in the mining industry; but that isn't exactly the case."

Uncertainty over tax credits

Mining tax credits for exploration companies remain attractive in Quebec despite the restructuring announced by the provincial government when it tabled its latest budget in November 2012. The tax credit will be reduced to 25% and mining companies may benefit from the enhanced 35% credit—and recover the 10% lost from the former regime—on the condition that they grant a stake in their projects to the government of Quebec. But this component remains to be clarified: "We still don't know what form the government's interest in mining projects will take," says Lucie Chouinard. The former tax statutes allowed mining companies to benefit from a 35% tax credit in Quebec. And with certain sums committed prior to 2008, mining credits could reach 45%. Furthermore, "under the former regime, companies benefited from a good dose of tax relief. Initial investments could be quickly amortized against profits," explains Lucie Chouinard. However, with new projects, tax allowances are spread over much longer periods, requiring mining companies to pay taxes much faster. "As as result, a number of mining companies will be left with tax balances at the end of their projects that they will not have been able to expense." As the latest federal budget reduced its tax benefits through the accelerated capital cost allowance, Quebec's harmonization with the federal tax rules will keep mining companies on alert until the next provincial budget.

Bill 43 undermines investment appeal

With Bill 43, the government of Quebec is requiring that mining companies file a feasibility study for ore processing in Quebec and pay a financial guarantee covering 100% of site rehabilitation costs in the first two years of operation—prior to awarding their lease. "Osisko agrees with the financial guarantees. We ensure that mining companies meet the expectations of society as a whole. It's a best practice and we support it 100%."

With regard to secondary and tertiary processing in Quebec—an important component of Bill 43—the required feasibility studies will increase the expenses of junior mining companies. In some cases even, the feasibility studies will serve no purpose, namely in the context of global overcapacity or because the processing of certain metals simply does not apply. Alhough the idea of developing Quebec's secondary and tertiary processing industry for rare earths (such as lithium) is often raised,

certain mining companies consider that to be risky in terms of financing and execution. According to Osisko's vice president: "Our position is that we're miners; we've developed mining expertise. We're not manufacturers." Obligating mining companies to process ore would thus represent an additional risk because it would make their business models more complex.

For Bryan Coates, it is crucial for exploration companies to continue engaging in research and development. But because of the measures that have reduced mining investment, most exploration projects have been put on hold for the time being. Given this situation, which is postponing further discoveries in Quebec, he foresees an impact on the province's mining sector within 10 to 15 years. "What we need is to raise the profile of the mining industry both inside and outside the province to attract investment." Mining is an economic engine that pulls in players from several other industries.



Northern infrastructures

Logic or logistics

Given the vast expanse of rugged terrain and harsh climate, infrastructure projects in northern Quebec are often significant undertakings.

Good financial and environmental planning is required, along with an appropriate governance structure. In the words of Chibougamau mayor Manon Cyr, who has a master's degree in land-use planning: "Infrastructure doesn't spring up overnight. It can take seven to 15 years to build a mine, so you have to think far ahead about the facilities and the infrastructure financing the mining companies will need."

Infrastructure essentials

"No transportation infrastructure, no mine. Northern development comes down to mine development," says Deloitte's Sylvain Rouillard, Senior Manager, Infrastructure Advisory & Project Finance, Financial Advisory. "And don't forget that mining is a cyclical industry," he adds. "You need long-term vision when deciding to invest in infrastructure." Although infrastructure construction and maintenance have traditionally been handled by governments, the issue takes on a whole new dimension in the North where the infrastructure is there more for the mines than for the public in general. "That's why it's important for businesses to be stakeholders. It's a matter of balance and fairness for future generations," says Ms. Cyr. "If a company needs a road for its project, it's only natural that it should pay its share." Stornoway mining company invested in the construction of the last two segments of the Route 167 extension connecting Mistissini and Chibougamau to a number of mining projects, including its Renard diamond project.¹⁰

The road to the Otish Mountains was built on budget, on time and as per its business model, thanks to partnerships with local businesses like Chantier Chibougamau and Jos Ste-Croix & fils Ltée, but other large projects have been put on hold as a result of lower resource prices or partnerships that have yet to be developed.

There are currently few road, rail, port or airport infrastructure projects underway in northern Quebec, and many projects are pending while the governments are developing their policies. "So now is the time to start trying out scenarios, performing analyses, developing models, and thinking about which governance structures and contractual strategies would be the best to adopt, as with the railway connecting Sept-îles to Schefferville, in order to be ready to start construction in five years," says Sylvain Rouillard. He notes that having a long-term vision is important when it comes to northern development. "If we hold back on investing, when metal prices rebound, we won't be ready." And although the Labrador Trough is brimming with world-class iron ore, international competition is fierce and transportation costs factor directly into the price of the resource.

So we don't miss the train

"In road or municipal infrastructure development, things get interesting when the other levels of government want to team up and work with us," explains the mayor of Chibougamau, which has benefited from the loan bylaw of Quebec's municipal affairs department and Hydro-Québec royalties of up to \$1.5 million per year since the Eastmain project was developed. That money has been invested back into municipal infrastructure. In the last three years, Chibougamau has invested more than \$30 million to modernize certain infrastructures or to develop new ones (particularly its water supply system) without increasing

the net debt of the municipality, which currently has a population of 7,660. Once the road to the Renard project is completed in the fall, and Stornoway has finished financing it, construction will begin on the mine.

For transportation infrastructure, like the railway north of Sept-Îles, Sylvain Rouillard also believes in partnerships. "You have to plan based on the mining companies' priorities, but consider issues such as transfer of stakeholder risks and value for public money." Risk transfer is a key issue in financial modelling for infrastructure projects. There are many possible governance models and although public/private partnerships are standard these days, other infrastructure implementation frameworks can be viable if you have a large user pool.

Infrastructure domino effect

Northern economic growth is contingent on mining development, which in turn depends on infrastructure development. "It's road infrastructure that's going to add value and enable other infrastructure development," says the Chibougamau mayor. Once the big diamond project is underway, new workers and suppliers will come and drive residential development in Chibougamau, which hopes to capitalize on the anticipated regional economic growth. "The challenge for a town like ours is planning and organizing land development," says Ms. Cyr. The municipality plans to develop 150 new residential lots for single-family homes and 35 lots for multi-unit residential buildings. "As soon as the mine gives the green light, development is going to kick into high gear, and we'll be ready for it."

Because infrastructure supports wealth creation, it needs to be addressed before you can seize business opportunities. The municipalities of Chibougamau and Chapais have been proactive in signing a partnership declaration with Stornoway to plan the mining company's manpower, goods and service needs beyond Route 167. With an \$800 million project north of Chibougamau, the mayor has long been aware of the economic spinoffs for her region. That's why she encourages local partnerships: "Businesses in southern Quebec would be smart to team up with businesses in the North because of their expertise and knowledge of the terrain."

"Businesses in southern Quebec would be smart to team up with businesses in the North because of their expertise and knowledge of the terrain."

Manon Cyr, Mayor of Chibougamau

Quebec's power paradox

If transportation infrastructure is the lifeline of northern development, energy is the lifeblood of mining viability. And for projects that are a long distance from hydroelectric facilities, it's the heart of the matter.

Power, whether hydraulic, fossil-fuelled or wind, is distributed by way of public infrastructure. The issue, therefore, is similar to that of roads, and it begs the same question: Who should pay for the construction of the energy infrastructure? Paradoxically, even if 97% of Quebec's electricity is generated by hydroelectric plants located in the North, two vast northern regions, Nunavik and the Labrador Trough, are not served by Hydro-Québec.¹¹ These are two regions where mining projects abound and which are energy intensive, particularly the mining of base metals (alumina, copper, iron and zinc) where a grinding process is used to extract the minerals. For their power needs, the mining companies—and local communities—in those regions produce their own electricity using fuel oil or diesel generators. But using these non-renewable energy sources in the North is six times more expensive than Hydro-Québec's \$0.05/kWh Rate L as a result of transportation costs, not to mention environmental charges. As for wind power, this form of energy requires an additional source of production, often using fossil fuel, because its efficiency

An important price differential for an economic driver

Not all mines benefit from the same geographical location as Osisko's Canadian Malartic mine, which is an operational success. Its facilities were 20 km from the Hydro-Québec network, making access to this power source more feasible. For Patrick Godin, Vice-President and Chief Operating Officer of Stornoway Diamond Corporation: "If we in Quebec want to be competitive, there's no question that we need to take a concerted approach to land development in terms of electricity distribution." According to Mr. Godin, Stornoway financed a Hydro-Québec feasibility study, which determined that the capital cost for the construction of the energy infrastructure would be excessively high, an investment that the

mining company—which has yet to begin operations—was unable to assume on its own. Hydro-Québec's calculations for the construction of a 161-kilovolt transmission line over 160 km to link the Laforge-1 dam to the Otish Mountains (the site of the Renard diamond project) showed a construction cost of \$173.6 million. 12 "In our financial planning, we had calculated that the line would cost us \$125 million," that was one reason why, according to Patrick Godin, Stornoway was forced to choose a fossil energy source to produce electricity for the mine.

Stornoway would have preferred using electricity from a clean energy source for environmental and social reasons. It is already anticipating a negative energy balance, which it will have to offset by paying taxes for the mine's greenhouse gas emissions. Unfortunately for the company, its facilities are too removed from the only supplier of hydraulic electricity. "It's a catch 22: An enormous amount of capital is needed to develop a project like Renard. And when the company has to support all the infrastructure, which is actually public infrastructure, the project is simply not viable; it becomes impossible to finance," says the vice-president of operations. "Stornoway is already doing a considerable amount. We are supporting 97 km of road between Chibougamau and the Otish Mountains. We are bearing the cost of the entire regional communications system and we plan to build a landing strip and small airport that will also be for public use." He adds that these expenditures for public infrastructure are not compensated by additional credits or any deductions other than those used in calculating mining and corporate taxes. Yet these infrastructures will pave the way for other exploration projects and other mining companies in the future. They will also serve to develop communities in the North.

Splitting the bill

For Martin Granger, Partner and Deloitte's Energy & Resources leader in Quebec: "It's unfortunate that we have trouble recognizing projects that are successful and profitable. The impression is that we are giving away our resources. But we need to view the situation from a broader perspective: some investors lost a lot of money in other projects. They need to have projects that are profitable, that make money, or they won't want to invest anymore." Truth be told, external investors need to invest for years in the hopes of making a discovery that will allow the company to turn a profit. "Whenever there are

investments in infrastructure, there is job and economic creation. This brings in taxes for the government, the only stakeholder that is sure to reap economic benefits," says Mr. Granger. "Developing mining camps that produce their own electricity using generators is not the way to develop permanent infrastructures and build communities in the North." According to him, it is imperative to find cost-sharing solutions to assist mining companies and thereby promote the development of a northern economy. "In the same way, it is unthinkable for a mining company to build a railway line assuming it will be the only user. Similar reasoning is required with energy infrastructure." In the case of electricity, consumption-based pricing is another factor in devising a fair and profitable solution.

"The government doesn't have to assume the risk on its own," says Patrick Godin, who favours risk-sharing among stakeholders. "If the government sees that an electricity grid can be linked to other projects, then it can share the risk and ultimately have it paid for by the next user." Citing the construction of the road to the Otish Mountains, he explains: "The government finances the road, we build it and we pay for it later." This is a model that, in his view, could apply to the construction of energy infrastructure. The importance of finding the right governance approach really comes to light when considering mining expenses. "Deposits have to be exceedingly large because our cost structure is more capital intensive," says Mr. Godin. "So if the energy isn't there, it becomes much more difficult to generate high-volume projects."

Fewer projects in the works. More opportunities to reflect.

Stornoway is paving the way to the Otish Mountains in partnership with Aboriginal entrepreneurs and the Quebec government, and several exploration projects could emerge in the region as a result. "We are opening up the region, but everyone will gain access to it." This will reduce the logistics costs for the mining companies that will follow. Aside from this future development potential, for Patrick Godin: "The favourable economic situation created by Plan Nord has been considerably diminished by various factors such as the downturn in commodity prices, and recent and recurrent regulatory changes regarding natural resources," but also the discontinuation of projects like the feasibility study for a gas pipeline towards the North Shore and the stalemate in negotiations in the project for a train north of Schefferville. Add to that America's growing energy independence vis-à-vis Quebec's hydroelectric power thanks to U.S. shale gas production. These days, government-owned Hydro-Québec can barely sell its electricity for more than 4 cents a kilowatt hour to our neighbours to the South. Then there is the overproduction of electricity; Hydro-Québec Distribution expects to spend \$500 million this year to absorb the surplus power. 13 Meanwhile, the James Bay Cree plan to develop the wind power potential of their region, even if it means outpacing Hydro-Québec, in a bid to establish infrastructure that causes less environmental damage. 14 As we wait for natural resource stock prices to recover, we have the opportunity at this economic juncture to reflect on the issue of power distribution in the North. Moreover, a new energy policy for Quebec is expected in 2014.

If we in Quebec want to be competitive, there's no question that we need to take a concerted approach to land development in terms of electricity distribution.

Patrick Godin, Vice-President and Chief Operating Officer, Stornoway Diamond Corporation

Telecommunications

Call for partnerships

In the telecommunications sector, the challenge is similar to that of transportation and energy infrastructures, namely cost sharing. Northern Quebec cannot be developed without effective telecommunications services.

"Whether for telephony, video or even the surveillance of key sites, equipment or assets, northern Quebec needs a solid telecommunications infrastructure to develop," says Consulting partner Marc-André Renaud. In addition to the industrial and commercial applications, telecommunications also provide site workers in remote regions with entertainment to enhance their quality of life and telemedecine as a tool for workplace health and safety.

The lay of the land

Currently, Abitibi-Témiscamingue, which straddles the 49th parallel, is the only region where fibre optics are used to provide telecommunications services. In the North Shore, the territory is served by other land and microwave infrastructures. As for Nunavik, telecommunications are provided by satellite to the northernmost boundary, making transmission costs there astronomical. This means that satellite technology can only be used for voice and email, making the transmission of computer applications nearly impossible.

"One phone minute costs three, four or five dollars and a megabyte costs a small fortune. The economics of telecommunications dictate that it isn't remoteness that multiplies costs, it's the technology used, simply because a telecom company has to absorb the tens of millions of dollars it costs to launch a satellite," sums up Marc-André Renaud.

Fortunately, there tends to be a global decrease in manufacturing and installation costs for telecommunications infrastructure, unlike the costs for other types of infrastructure that increase due to labour, in particular. Two other elements benefit telecommunications infrastructure: technology and growing demand. Thanks to advances in technology, the quality and capacity of bandwidth increases rapidly, while manufacturing costs decrease and consumer demand is constantly on the rise. However, the situation is different in more remote regions, particularly in the North where the topography and climate influence infrastructure deployment and maintenance. Furthermore, telecommunications operators in these higher latitudes must be equiped with skidoos, ATVs and bush planes to maintain and repair their installations, which are often easier to reach by skidoo in winter than by truck in summer owing to the less passable forest roads or absence of roads altogether. One final consideration: just like the roads, the current infrastructures in the North lead to dead-ends and there is a vast empty space between the 50th and 55th parallels that is mostly served by satellites.

Technology rationale

So the guestion is: How do you install such key infrastructure for northern development considering the major investments required in that region? South of James Bay, the deciduous tree coverage is not conducive to microwave use; other terrestrial links such as fibre optics are the preferred means. However, microwave technology becomes more feasible in the tundra north of the dams on the La Grande River. To the east, in the Lower North Shore, TELUS uses microwave signals. To serve this territory and the area further north, fibre optics could also be an option. But regardless of the technology used, a business is bound to follow the logic of profitability. "If I want to install cell towers, I need access," says François Côté, Executive Vice-President and Vice-Chair, TELUS Quebec, TELUS Health & Financial Solutions and TELUS ventures. "I also need electricity to supply the towers. There are key components required and a process to follow." With regard to fibre optics: "If it costs \$20 million to install the line and TELUS gains only four new clients at the end of the process, we won't go through with the project," adds Mr. Côté.

Adding partners, splitting the costs

Clearly, fibre optics can serve sites north of Sept-Îles. For a mining village that is established there, even temporarily, for 10 years, "we've developed several options that allow us to provide high-speed Internet service," says Mr. Côté, who also insists on the need to offer high-quality services to mine workers in those remote regions for entertainment purposes and to help facilitate communications with their families. For businesses, telecommunications needs remain unmet in areas such as IT, voice transmission, site surveillance and the management of automated parameters using M2M applications. But in order to ensure coverage of a mine site, access is required, whether by rail, road or other public infrastructures like those of Hydro-Québec.

To build telecommunications infrastructure, it takes concerted development action between various stakeholders to make the investments profitable. For Deloitte's Marc-André Renaud, investments cannot be borne entirely by the telecom companies. "If the private sector is left to build infrastructure, that means a competitor would have to build its own infrastructure, thus increasing the costs for Quebec society, as was the case with the transcontinental railroad to develop western Canada," notes Mr. Renaud, recalling a counter-example where the government subsidized two railways (Canadian National and Canadian Pacific) to create competition. "A governance framework needs to be implemented," in order to avoid cost duplication and excessive prices for users. François Côté at TELUS agrees: "It's better to carry out the project in partnership and make sure that value is created for the province."

The return on investment is therefore the issue in developing these infrastructures in a territory where the remoteness and topography make for a more complex business model. Telecommunications infrastructure, just like other public infrastructures, must be shared. "If we can partner with CN or Hydro-Québec, then things start getting interesting," says Mr. Côté. There's something in it for everyone. In the case of the Hydro-Québec infrastructure, a fibre optic line is already installed along its network. The fibre technology could thus be shared between the government agency and a telecom provider for commercial use. Such a government investment would be paid off by the economic spinoffs generated by the mining companies and local communities, which could access the fibre optics at lower cost.

Multiplying business opportunities through technology

Some consider the North like another planet. There are as many challenges as business opportunities and the telecommunications sector is the ideal promoter of northern development, which farsighted leaders consider as the future of Quebec. Today, Australians are already meeting the challenge posed by the remote western part of their country. At some sites, namely Rio Tinto's West Angelas Mine, a certain number of operations are conducted remotely: the ore is transported by trucks that are remote controlled by employees based in Perth, over 1,000 km from the mine. The technology enables operations at the West Angelas mine to be carried out 24 hours a day with fewer

"It's better to carry out the project in partnership and make sure that value is created for the province."

François Côté, Executive Vice-President and Vice-Chair, TELUS Quebec, TELUS Health & Financial Solutions and TELUS ventures. workers on site. Such an application could be provided in Quebec, for example, by a manufacturer of flight simulators for use on a site or for telemedicine purposes. A number of everyday services such as mail, government or other professional services can be ensured remotely in northern Quebec. But for that to happen, bandwidth size and quality must be up to par. Fibre optics remains a key link to provide these services and to develop the North.

In the future, the northern seaway will likely be open 12 months out of the year. This new reality will create a fair share of business opportunities. Along the coast of Labrador and in northern Quebec, telecommunications will enable boats to navigate and new ports to be built. "Mining companies as a whole are the largest builders of marine ports in the world, as shipping is the most cost effective means of transportation," notes Marc-André Renaud. "And you cannot have shipping without telecommunications." Therefore, developing marine transportation and telecommunications would serve two good purposes: speed up northern development by reducing costs and attract more investors to Quebec thanks to affordable and effective telecommunication services. "Exploration and development could begin in the North and move South; or start from the shore and move inland," adds Mr. Renaud. By thinking differently, the development of telecommunications infrastructure can lead us far.



Social acceptability

The sum of small things

Social acceptability, just like asking permission before crossing over a neighbour's lawn, is a sign of respect and community mindedness towards the people living in the territories affected by resource development projects.

Social acceptability is one of the pillars of sustainable development, which comprises three basic elements: stakeholder transparency, integrity and a willingness to listen. 16 Communications must be established very early into a project between stakeholders from various horizons, i.e., mining companies and affected communities. Companies from as far away as China and India must reach an understanding with municipalities, but also with Quebec First Nations communities, each of which have their own culture, ancestral territory and claims.

"Developers must view social acceptability as a project in its own right, on par with that of the mine itself." For a mining project to be successful, you first need a successful social acceptability project."

Michel K. Landry, Partner, Financial Advisory and leader of the Deloitte Equation Nord initiative

The lay of the land in Aboriginal territories

In Quebec, there are six Aboriginal groups north of the 49th parallel. Half of those groups have signed a number of treaties, particularly with the government of Quebec. It's through such agreements that the Cree, Inuit and Naskapi have settled their land claims. However, discussions entered into at the same time with the three other nations, i.e., the Innu, Attikamek and Algonquin, have not resulted in agreements and have not settled their territorial claims. According to Aboriginal lawyer Nadir André: "With regard to acceptability, it isn't because a group has signed a treaty with the government that it will necessarily be for or against a project." The best example is the Cree nation, which is very pro-development. In the past, the Cree signed several socio-economic agreements with mining companies, including Goldcorp and Stornoway, and with Hydro-Québec, but that didn't prevent members of the Mistissini community from being staunchly opposed to the Strateco uranium mine project. The mining company had already invested over \$120 million in its Matoush project, 17 but the environmental risks were unacceptable to the Cree. "Even though it was the Cree nation that signed the Paix des braves and has a treaty with the government and is open to development, its members rejected the project. The case was brought before the courts, and the government of Quebec refused to issue the certificate of authorization largely because of the opposition from the Cree," said Mr. André. "Regardless of the communities' means, level of organization and governance, the question of acceptability boils down to the consequences a project has on a community and its territory." This has been confirmed in the case of a uranium mining project on the North Shore, in the Sept-Îles region, where Terra Ventures provoked a public uprising, backed

by the region's physicians. To prevent the physicians from following through on their strike threats, the government issued a moratorium on uranium projects for all of Quebec. Mr. André adds: "Despite Aboriginals' differences, I think that social acceptability criteria are increasingly similar for Aboriginals and non-Aboriginals alike."

Risks of disagreement

Weither the project is an open-pit gold mine, an iron mine that is commissioned in a region following several other mining projects, or a diamond mine, all mining companies must undertake the unavoidable stage of achieving social acceptance. No matter that it is remote or little inhabited, that its people are Aboriginal or non-Aboriginal, each region has a history of negotiations with stakeholders. A community may be opposed to a project even though it is faced with very high unemployment. For example, if a developer has to expropriate land to open its mine, it must take steps to consult the community, to allow it to express its demands, in short, to establish a dialogue so that the company can properly understand the people's needs and provide them with acceptable compensation. Even if a mining company has already obtained its operating licence, it must engage in public consultations to avoid the risk of triggering social unrest. "Social acceptability is a very complex sum of small things. It's not something you can improvise," according to Deloitte executive advisor Normand Bergeron. "The proverbial grain of sand can derail a project." In contrast, integrating Aboriginal communities before the start of development can foster social acceptance. That was the case with Raglan Mine and the Inuit communities of Salluit, which signed an agreement containing environmental and economic clauses: the Inuit benefit from profit-sharing and the company ensures their closer collaboration and a labour pool to meet its needs for the years to come. Such an agreement promotes regional economic development and creates a positive sustainability impact, both for the communities and the company.

Making it crystal clear

Companies that achieve social acceptance are those that plan ahead. From the outset, they will appoint a spokesperson and quickly launch consultations with stakeholders. According to Michel K. Landry, Partner, Financial Advisory and leader of the Deloitte Equation Nord initiative: "Developers must view social acceptability as a project in its own right, on par with that of the mine itself." In his view, a good conductor is required to establish communications and understand the needs of both developer and community. The company's designated spokesperson, whether internal or external, must be multi-skilled. As noted by Michel K. Landry: "Great care must be taken when choosing the person. He or she must understand the needs and values of the affected community in order to assess the conditions it is willing to accept as well as their consequences on the project's viability." Between the developer and the community, a whole range of expertise is brought to bear to deal with sustainability, environmental impacts, human capital, infrastructure and legal matters, particularly in discussions with Aboriginal communities towards the signing of socio-economic agreements.

Companies that are successful in obtaining social acceptance often make good presentations to the communities. Through scheduled meetings, they take care to properly explain their intentions and make use of such tools as an effective website and round tables to collect communities' demands, promptly respond to their questions and keep an open dialogue. "The community can quickly sense if the developer is taking their demands seriously," says Normand Bergeron. "The process requires communications specialists who have enough empathy to understand the community. Moreover, the person in charge of community relations has every interest to remain on site, close to the affected community, to stay informed of public opinion on the project." This delicate process requires much transparency.

Aboriginals as business partners

According to Nadir André, there's a whole new northern dynamic in Quebec. Historically, Aboriginals were key partners in the fur trade and forestry sector. With the industrial revolution, they were excluded from development projects as they did not have the skills required by the new industries. "Because they stood in our way, we told ourselves that we would put them in reserves," says Mr. André. The Aboriginal lawyer today advises his clients to get involved in projects: "What we are witnessing today is the Quiet Revolution of First Nations." In fact, today's development of the North is no longer done without the support of Aboriginal communities; they are increasingly looking to become project partners. "That's encouraging because it will enable Aboriginal groups to become involved in development, to raise

their education levels, to increase their revenues, and to break out of the cycle of government dependence by taking charge of their destiny," according to Mr. André. "In addition, Aboriginal involvement will improve their governance, public services and infrastructures, particularly for young people. All this while carefully preserving their language, lifestyle and territory despite the impacts that certain project may have." Over and above social acceptability and the negotiation of socio-economic agreements, companies will increasingly be called on to enter into business partnerships with Aboriginal communities. The First Nations lawyer encourages them to invest part of the funds from these agreements in businesses, and to create trusts and investment vehicles. He foresees that Aboriginals will become key economic players in northern Quebec, maybe even developers. "Aboriginals are part of the equation."

"Despite Aboriginals' differences, I think that social acceptability criteria are increasingly similar for Aboriginals and non-Aboriginals alike."

Nadir André, Partner, Borden Ladner Gervais



In conclusion

Quebec's underground is the foundation on which many mining projects are built. These can lead to extraordinary business opportunities for the mining supply chain, equipment manufacturers and service industry.

In addition, mining projects can generate long-term business opportunities whether through the development of access and technology infrastructures, energy projects, maritime transportation through the northern waters, or from growth in accommodations and tourist infrastructures. The development of telecommunications infrastructure will also enable other ventures including in site surveillance, entertainment, telework and telemedicine. In other words, developing the North can be very attractive for entrepreneurs.

Companies can minimize the risk of failure and seize new business opportunities by stepping outside conventional business models. Furthermore, "your competitors may not be who you think they are," cautions Michel K. Landry, Financial Advisory partner and leader of the Deloitte Equation Nord

initiative. In fact, "some entrepreneurs have taken advantage of ideas in the North that had nothing to do with their company's original purpose; ideas that were inspired by needs they witnessed on the ground." However, in order to invest in a region that is so dependent on fluctuations in natural resource prices and global competition, it is imperative to engage in meticulous planning in order to effectively identify the benefits of operating in the North.

Since the North is unfamiliar territory in terms of its vast and rugged geography, harsh climate, and sparse infrastructure, companies cannot apply the same business models as those used in the South. Business development paradigms are turned on their heads by this different reality. In an environment that is known and understood, some planning elements can sometimes be left to chance without too many consequences. But in the North, nothing should be overlooked. Bold entrepreneurs and investors who do not fear change and who are driven by challenge can find business opportunities by adopting innovative solutions. However, achieving success and creating wealth for themselves and for future generations require that they seek out the help of experienced guides.

"Your competitors may not be who you think they are."

Michel K. Landry, Partner, Financial Advisory and leader of the Deloitte Equation Nord initiative

Recommendations

Do you want to develop business in northern Quebec? Here are some tips:



Perseverance

- + Be more insightful. Show more resolve.
- Do the groundwork; prepare your resources and project logistics through meticulous planning.



Business advice

- + Do not go into it alone. Surround yourself with experienced people who know your project's environment, and seek out more business advice.
- + Step outside your conventional business model and do not take anything for granted—if you are used to having suppliers and commodities at hand, you should know that the situation is quite different in remote regions.



Risks

- + Consider reviewing your supply chain and workforce management.
- + Work in partnership with other economic stakeholders.



Costs

- + Avoid the conventional operational costing model.
- + Opt for a financial structure that will allow you to face long-term risks such as economic downturns or managing increased growth as change can be quite sudden in a region as dependent on natural resources.

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