



Pierre Arcand

Minister of Energy and Natural Resources and Minister responsible for the Plan Nord, Government of Québec

What were the main objectives you set for your mandate?

When the Québec Government came to power in April 2014, it made a number of commitments for the mining sector. We undertook to share mining, oil and gas royalties with local and Aboriginal communities, use natural gas supplies to aid in the recovery of the Côte-Nord region, and develop a world-class network of suppliers and equipment manufacturers in the mining, hydroelectricity and forest sectors. In addition, we promised to reactivate sustainable Northern development with the Plan Nord, benefiting more workers, companies, suppliers and equipment manufacturers and generating new jobs in every region of Québec.

Our Government has established a favorable environment for mining investment. We have a new mining regime, clear, stable and predictable. Investors know that and they participate actively in the economic development of Québec. Indeed, Québec's business structure is competitive and offers some of the most advantageous measures in Canada.

Broadly speaking, what we want to do is develop existing mining industries and create new ones. We also want to create a predictable business environment, in particular with respect to land access in the North.

In April 2015, You and Premier Philippe Couillard announced the revival of "Plan Nord". What has been done so far, and what role does the Department of Mines play in the equation?

The Société du Plan Nord (Plan Nord Corporation) provides practical help for companies with activities in the area covered by the Plan Nord. It organizes missions outside Québec and invites the companies to take part. It also helps to finance certain projects, and over-

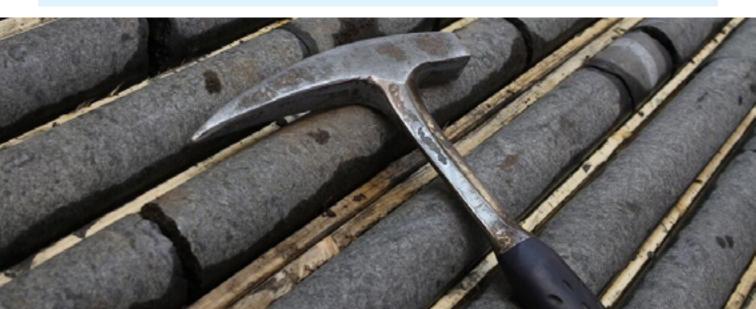
sees the preservation and development of infrastructures in order to support the application of the Plan Nord.

The Plan Nord has a budget of \$450 M over five years. The Société du Plan Nord (Plan Nord Corporation), created a year ago, already has a number of achievements to its credit, including investments in the Bloom Lake mine, acquisition of railway and port infrastructures in the Pointe-Noire sector of Sept-Îles, a direct-shipping iron mine project in Schefferville, measures to promote regional employment, a telecommunications investment in Nunavik, assistance to the Town of Sept-Îles for economic and environmental projects, the signature of a new agreement with the Cree Nation, and funding for a feasibility study for a rail link between Sept-Îles and the Labrador Trough.

What are the Department of Mines' main plans and objectives for the year 2016, and what is your final message for the 63,000 worldwide readers of The Engineering and Mining Journal?

The Québec Government unveiled its new Strategic Vision of Mining Development last March. The Vision takes the form of a five-year plan containing 50 actions designed to achieve 38 objectives. Three main guidelines are identified: (1) advance existing mining industries and develop new ones, (2) prevent and mitigate environmental impacts, and (3) promote transparency and citizen participation. The Vision applies to the entire mining sector and also touches upon primary metal processing, suppliers and equipment manufacturers. It involves roughly ten Government departments. The proposals in this government strategy are closely linked with measures already presented in other government strategies, such as the Energy Policy, the Plan Nord and the Maritime Strategy. With the Strategic Vision of Mining Development, the Government demonstrates that all of its actions towards promoting mining development in Québec are coherent and in accordance with the principles of sustainable development of this important industrial sector of the economy. An English version of the Vision is available on the MERN website.

In conclusion, Québec has a lot to offer in the mining sector, including vast mineral potential, a high quality workforce, and a context favorable to investments. The findings from the Fraser Institute's most recent survey clearly show that mining investors are interested in Québec. Québec ranks 8th in the world, in terms of attraction for mining investors. And we plan on staying that way. •



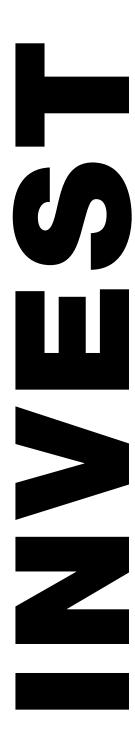
Introduction

Québec's Political Improvements, and Legislative Stabilization

Presently, saying that the global mining industry has been experiencing a very long downturn does not constitute news for anyone, anywhere, anymore. Every commodity has had its ups and downs. We remember gold companies starving for cash when the extravagant US\$2000-per-ounce (oz) prices started plummeting in 2013, but we must also not forget that back then, iron ore producers were expanding operations around the world, based on high demand from China and a price point of around US\$150 per metric ton (mt). Keeping these facts in mind, we arrive in present-day Québec, a mining jurisdiction traditionally known for its exceptional gold and iron ore reserves situated in the north of the province, in regions such as Abitibi-Témiscamingue (gold), and the Labrador Trough (iron ore. Gold is trading at roughly US\$1,250/oz, while iron ore prices are hovering at US\$60/mt. So is it all doom and gloom for "La Belle Province" and its miners? Quite simply put: no, not at all.

Many developments have been occurring within Québec's internal structure since 2013. The accomplishment with the biggest impact was the adoption of Bill 70, "An Act to amend the Mining Act," which cleared the waters for many potential investors. "With Bill 70 finally being passed in December 2013, the whole legislative uncertainty is now gone. The actual amendments are quite subtle, so there were little changes to the daily operations of mining companies," stated Eric Levy, partner at Osler, Hosking, & Harcourt LLP.

Norman Champigny, president of Sphrinx Resources, a company that has recently been busy acquiring and exploring high grade metamorphic terrains in the State, concurred: "The fact that we have a stable legislation now, one that will not change for many years to come, is a very positive thing." As always, politics also played a major role





Our expertise and financial resources will help your company prosper in Quebec.



RESSOURCESQUEBEC.COM





in the metamorphosis of Québec's attractiveness as a mining jurisdiction. On April 7 2014, the Liberal Party won a provincial majority government of 70 seats in the National Assembly of Québec, with the conservative Parti Québecois coming in second, with 30 seats. "The election of a new provincial government has had a good impact. The dialogue between the industry and the authorities has improved, there is a better general mood within the sector and investors now view Québec as once again being open for business," said Levy.

Communication and investor perception were not the only elements of the equation that improved as a result of this political change. One year later, in April 2015, Premier Phillipe Couillard announced the revival of Jean Charest's "Project of a Generation," the development of 72% of Québec's land surface, covering 1.2 million square km in the north of the province: the Plan Nord. However, this new version would be a scale-down of its 2011 original predecessor – Couillard called for public and private investments totaling C\$50 billion over 20 years through to 2035, a significant change from Charest's initial plan, of C\$80 billion over 50 years. Breaking that down further, C\$20 billion would come from Hydro-Québec's new projects, C\$2 billion from the government as public infrastructure, while the other C\$28 billion would be constituted by private-sector investments.

Consequently, the Société du Plan Nord was created in 2015 to implement this major endeavor. Over its intended timeline, the organization will benefit from a total estimated budget of C\$2.7 billion, which is generated by tax-money coming from the extractive industries operating within the Plan Nord area, and yearly Hydro-Québec contributions. Furthermore, a special fund, the Capital Mines Hydrocarbures (CMH), worth C\$1 billion, was also included within the initiative. This was entrusted to Ressources Québec, Investissment Québec's natural resource subsidiary: "The CMH fund is fully operational now. Out of that, C\$500 million will be exclusively dedicated to Plan Nord projects; the rest will cover all the province of Québec. Ressources Québec has made several investments in the market over the past years and in 2015-2016, we had 10 interventions over a broad scope of companies at different development stages of their projects for a total of C\$220 million. The two main projects we supported this year belonged to Osisko and Agnico Eagle, but in the past, we also offered help to Stornoway Diamonds (Project Renard's construction phase), and Canadian Royalties (Project Nunavik Nickel's operational scale-up)," explained Denis Williams, general manager of Ressources Québec.

Leaving legislation and politics aside and diving deeper into the operations of mining companies across Québec, we see numerous, rather surprising, and overall positive developments. From favorable US\$/C\$ exchange rates dramatically improving gold producer profits, to non-traditional mineral projects such as Nemaska Lithium, Stornoway Diamonds, or Arianne Phosphate marching strongly to operation, Québec is visibly rallying up forces and moving in the right direction. •

Frank Mariage

Chairman of the Board, Association De L'Exploration Minière Du Québec (AEMQ)



Bill 70 was passed in December 2013, finalizing the long process of reforming Québec's mining regime. What has been the overall effect of this adoption on the mining industry?

Québec went through four legislative attempts to reform the Mining Act in five years. Moreover, during this time, provincial elections occurred as well, where mining was a hot topic, in terms of what the industry meant for Québecers, and what economic benefits the population was seeing from it. All these factors created a very difficult environment for our industry, in the province. Mining is an industry of risk, and implicitly, venture capital - what we need to understand is that venture capital does not mind risk, because investors can calculate that (it is part of the game); what they cannot calculate or measure however is uncertainty. And that is what Québec represented for them, from 2009, all the way to the 10th of December 2013, when Bill 70 passed, and the new Mining Regime was adopted. Now, we have greater certainty, stakeholders know what to expect, and we can be sure that no politician will want to touch the mining act for a very long time. So on the one hand, that uncertainty that is so detrimental to venture capital has disappeared, but on the other hand, we are now confronted with an unfavorable global commodity climate. The AEMQ is working with the government to see what we can do together to offset that, and create the favorable conditions that will allow investment capital to come back.

In April 2015, Premier Philippe Couillard announced a scaled-down revival of Plan Nord. What has been done so far?

We had a Plan Nord 1.0, and now a revised version, a Plan Nord 2.0. The initial objective was to help out the iron ore mega-projects in the Labrador Trough, which needed massive infrastructure investments, but with the downturn of the iron prices, people started looking West in the province, analyzing what else is out there. So now we are happy to see the advancement of other projects not related to iron ore: for example, Stornoway Diamonds is well on its way to become Québec's first diamond producer, Nemaska Lithium is rapidly advancing its project, and Arianne Phosphate recently received the green light from the government to go ahead with its Lac à Paul operation. We have strategic minerals that will require secondary transformation, which will occur in Québec, and thus generate more jobs, and more added value. The challenge for Plan Nord 2.0 will be to create an infrastructure that can be used by all these projects that are scattered throughout the vast territory. The Société du Plan Nord is now active, and has financial resources, so we are seeing how the government is slowly, but surely working to create favorable conditions for investors to come back into Québec. A lot of works remains to be done however. •



Josée Méthot

President and CEO, Québec Mining Association (QMA)

Could you tell us more about QMA's implementation of the Towards Sustainable Mining program in Québec?

Since 2004, the Mining Association of Canada (MAC) has put into place the Towards Sustainable Mining (TSM) program, which is a set of tools and indicators that ensure responsible mining measures are in place for all of its members. Since not all of Québec's companies are part of the MAC, we decided in June 2014 that we were also going to implement the TSM at the provincial level, for all of our members. This measure was a clear reflection of the commitment that QMA has for sustainable development and responsible mining – we established a four year timeline to fully implement the TSM, and we are currently working with all our members to achieve that.

What are the current dynamics of Québec's mining industry, and are we seeing more mineral diversification in play?

The diversity of our mineral potential will ultimately carry us through the downturn. When the liberals launched the Plan Nord 2.0, they sent out a clear message: that mining is a core business for Québec, and that we need projects here. We all know this is a difficult time for iron ore focused companies, and predictions are that their downturn has not reached its bottom yet; the situation is not great for zinc, or nickel either. Thankfully, there are several factors that offset this. First of all, we have strong gold production in Québec, which, at the moment, is benefiting from the advantageous USD/CAD exchange rate. We are getting good news in apatite, with Arianne Phosphate recently receiving its environmental permits, and we are also looking forward to Stornoway Diamond's diamond mine, the first of its kind in Québec; elsewhere, Royal Nickel's Dumont project will enter its construction phase soon enough, as well. Another element that is making life easier for some companies is the low cost of petroleum, which is bringing operating expenditures down, in some cases. Rare earths and lithium projects are also bringing some hope and could help compensate, in their own ways, for downturns in traditional mining activities.

Ultimately, what makes Québec a great mining jurisdiction today and what are the QMA's plans for 2016?

The quality of our manpower in Québec, the excellence of our universities, and research centers, these are core strengths that we have here. Furthermore, even though political changes have occurred quite often lately, we are still a very stable and predictable jurisdiction, as compared to others. Québec has an excellent support system (suppliers, research centers, etc.) for its mining industry, which is really engrained in its culture. For 2016, the QMA is targeting to improve communication and dialogue with local communities and First Nations, so that is one of our top priorities. Otherwise, another important step will be the integration of Minalliance, an organization meant to promote mining to the general public, within our structure. Looking forward, the QMA will continue to offer all the support it can to Québec's mining industry, which has numerous established, and experienced responsible companies. •

Downturn Resourcefulness

Québec's Increasingly Diversified Mining Scene Counters Iron Slowdown, Uranium Moratorium, and Harsh Market Conditions

Over the past two years, press headlines largely covered the rather negative aspects related to Québec's mining industry. Iron ore prices steadily descended towards the \$40/mt mark, making the life of iron ore companies extremely difficult in Québec, a jurisdiction with tremendous potential for this commodity, especially in its Labrador Trough region. Moreover, in July 2015, the Bureau d' Audiences Publiques sur l'Environnement (BAPE) issued a 626-page study, advising Québec's authorities against uranium exploration and mining in the province, triggering the discontent of the Canadian Nuclear Safety Commission (CNSC), and sending a negative message to the international investor community. Add these events to an already depressed global mining environment, all within a climate of scarce financing sources, and the results should not contribute to a beautiful picture for La Belle Province's mining scene. Yet, somehow, within this scenery, riding the overall positive trends of Q2/Q3 2016, and benefiting from strong governmental support, several companies, with a line-up of non-traditional minerals for Québec, are fighting their way onto success.happened to some of our members. From an investment point of view, it transmits a negative message, and again, it creates uncertainty. The AEMQ filed a memoire related to uranium exploration with the BAPE, and strangely enough, the document was not even accepted," added Frank Mariage, the Association De L'Exploration Minière Du Québec's (AEMQ) chairman of the board.

Québec Mining's Unexpected Beacons of Hope

Having topped the 2016 OTCQX Best 50, a ranking of the best performing companies traded on the OTCQX Best Market, Nemaska Lithium is in a prime position to profit from the favorable dynamics of the global lithium market, which is expected to need up to 100,000 mt of new lithium compounds by 2021. Nemaska's Whabouchi project recently received a big vote of confidence from Canadian authorities mid-February 2016, when it secured a C\$12.87 million grant from Sustainable Development Technology Canada (SDTC), the institution's largest grant at the time. "This is an incredibly important endorsement because it shows we proved that our technology is viable to an array of high-level PHDs. On the governmental side, in the recent



1 866 382-4588 | hewitt.ca

past, Québec, as a mining jurisdiction, has not had a great image internationally: the frequent changes of government, the moratorium on uranium and the long-debated Mining Act changes did not help. However, in March 2016, with Ressources Québec putting C\$ 10 million in Nemaska Lithium equity, not debt, we saw a clear statement being made: that the government sees us as a real opportunity and is supporting us in the long-term. Simultaneously, it sent a message to the international financial community that Québec is once again open for business," said Guy Bourassa, the president and CEO of Nemaska Lithium.

With Whabouchi containing the world's second largest lithium reserve and an expected mine-life of 26 years, the future looks very promising indeed for Nemaska. "Domestically, things have been improving in Québec since 2013. We have a relaunched Plan Nord 2.0, which is much more inclusive and not as Labrador Trough focused anymore, and the Société du Plan Nord, an actual institution, actively working to implement this. Most of the commodities are down, whereas lithium is in a very good place. That, combined with the fact that we are an advanced project, makes us a very attractive investment opportunity for the government. We are well-positioned and the future looks bright for us. We will have completed the construction of the Phase 1 Plant by the end of 2016," added Bourassa.

Elsewhere, racing towards the finish line, Stornoway Diamonds is building Québec's first diamond mine – ahead of time and below its planned budget. Its Renard mine, which will employ close to 500 people, is now expected to produce its first ore in September 2016, with total costs of construction amounting to C\$775 million – five months ahead of schedule and C\$36 million less than its original expected cost. Stornoway Diamonds boasts Indicated Mineral Resources of 30.2 million carats (ct), with a further 13.35 million ct as inferred mineral resources, which should enable the company to produce 1.6 million ct/y over the initial 11 years of Renard's mine life.

"It is very encouraging to see mineral diversification happening in Québec, a province traditionally known for its iron ore and gold resources. More and more, new discoveries of rare earths, graphite, lithium, apatite, and even diamonds are making the headlines, strengthening Québec's brand as a mining industry, while offsetting the risks of being too focused on one or two commodities," said Denis Williams of Ressources Québec, which financed C\$240 million of Renard's costs.

But Investissment Québec is not the only Québec Inc. financial player involved in this up-and-coming success story. Caisse de Dépôt et Placement du Québec, another traditional and long-standing finance player in the province, also contributed C\$105 million to the project. Another unsuspected positive development came from Arianne Phosphate and its Lac à Paul apatite project, located in Québec's Saguenay-Lac-Saint-Jean region. With reserves of 472 million mt of 6.9% P2O5, and an expected 72 million mt of high-off grade concentrate at 38.6% P2O5, which will assure a 26-year mine-life, Lac à Paul will create more than 1,000 direct and indirect jobs during its operation. Additionally, the project, which holds a C\$1.9 billion net present value, is expected to only need 4.4 years for its capital payback. And there could not have been a better way for Arianne to end the year

2015 than it did, by receiving the ministerial decree from Québec's government to go ahead with its C\$1.2 billion phosphate project, for which it is now actively looking for financing.

Rare-earths also constitute an up-and-coming mineral segment in Québec, and companies such as Geomega Resources, Quest Rare Minerals, and Commerce Resources have been able to advance their projects in recent years, aiming to help create a Western counter-poll to China's dominance in the sector. "Since 2013, and the positive economics we had released in 2012 for our Ashram rare-earth deposit in Nunavik, we have had great metallurgical advancements on several different aspects of the project. We have been able to perform a significant amount of drilling, advance our environmental baseline data collection, and continue our talks with the other stakeholders in Nunavik that could benefit from Ashram going into production. Just in October 2015, we released the news of the highest grade rareearth element concentrate, with the highest recovery rate we have ever achieved (42% total rare earth oxide (TREO), at 76% recovery). Moreover, October 2015 also brought Commerce Resources the e3 Plus Award from the AEMQ, which is presented to the exploration company that best personifies responsible exploration as envisioned by the e3 Plus framework, developed by the Prospectors & Developers Association of Canada (PDAC). In addition to all of this, Commerce Resources was also able to recently identify fluorite as a by-product at its Ashram site, a discovery which further strengthens the economics of the project," said Chris Grove, president of Commerce Resources. •



Gold's Favorable Canadian Context

Throughout recent years, gold miners have been struggling with high operating expenditures, low ore prices and tough financing conditions, leading producers around the world to decrease capacity and reassess strategies, and juniors to fiercely fight for the little exploration financing still available in the market. During all this time, gold prices steadily decreased all the way to a seven-year low of \$1050/oz, in December 2015. Therefore, in this context, it should come as no small surprise to hear that Québec's gold producers are currently having somewhat of a field day. But why is that?

The first factor of the equation is related to the C\$/US\$ exchange rate. On July 4, 2014, the two currencies were almost at par, with C\$1.06 buying US\$1. However, on January 20, 2016, the situation looked dramatically different, with \$1 being valued at C\$1.46. Translating that into Canadian gold mining operations where costs are incurred in C\$ and revenues are obtained in US\$, we see great improvements in these companies' margins. Moving forward, the sec-

ond factor is one which gives hope to the entire gold mining value chain: in May 2016, gold was worth \$1250/oz, a significant increase from the prices of December 2015, and yet another profit amplifier for those producing the precious commodity.

In other words, companies such as Agnico Eagle (LaRonde, Lapa, and Goldex mines), Goldcorp (Éléonore mine), Canadian Malartic (Agnico Eagle and Yamana JV), Richmont Mines (Beaufor mine), and IAMGOLD (Westwood mine) are going through a very favorable period, despite gold's still precarious global profile.

"The beauty of the situation is that we have increased operational efficiencies during a development period for Richmont Mines. We analyzed the Canadian dollar situation and realized that we will have a two year window in which we could maximize development work at our Island Gold mine in Ontario [...] So we have partially sacrificed 2015 and 2016, with the vision of reducing costs by 50% during 2017-2022. Richmont Mines has essentially po-

"We see a sense of unity in Québec, which fosters an environment that encourages companies with initiative to grow."

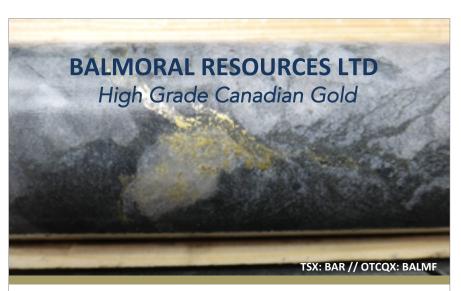
- John W. Mercer, President and CEO, Dundee Sustainable



sitioned a mine with 6-7 years of predeveloped infrastructure already in place, which is quite unique," said Renaud Adams, president and CEO of Richmont, which leveraged its Québec assets to develop its Ontario propriety.

"2015 and 2016, saw a lot of free cash flow being generated from our Monique and Beaufor assets in Québec. Monique was the only openpit story in Richmont's 35 year history and it was a complete success for us [...]. It is now depleted, but we managed to fully leverage it in the meantime to become more aggressive at Island Gold, which started producing more, completely offsetting the loss in production in Québec. This balancing policy will continue with the Beaufor mine, which is a free cash flow option at all times for us. We have just positioned ourselves to continue there for another two years, all based on current reserves," added Adams.

"Essentially, from 2013, Richmont Mines has moved from a 30,000 oz short mine-life producer, to a long mine-life 80,000 oz producer, and we hope to increase that number further to 100,000 oz, in the future. Gold mining is, and will remain, a very strong aspect of Québec's society, especially in Abitibi. As producers, we are going through favorable times now and our hope is that we have learnt from the previous cycles that the good times do not last forever [...] The actions we are taking today are meant to make us perform even during the most pessimistic future scenarios," concluded Adams.



Blazing the Trail to Canada's Next Great Gold Discovery

- High-grade Martiniere Gold System in Delineation
- 700 sq km of Exploration Upside Adjacent Canada's Largest Gold Mine
- 2x Quebec Explorers of the Year
- Active Drill Projects on Multiple Fronts

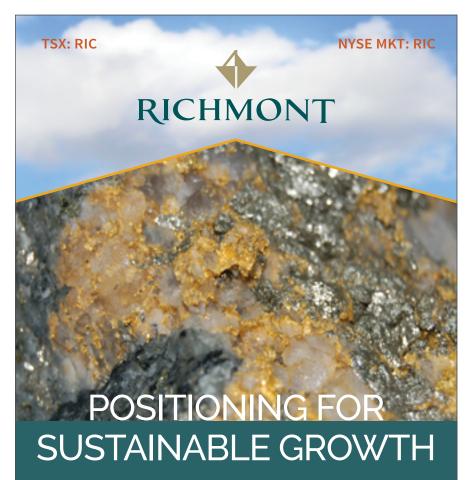


info@balmoralresources.com // www.balmoralresources.com

However, this state of well-being is not yet shared by the vast majority of Québec's gold juniors that are still finding it very difficult to procure financing. Consequently, the market context favors mergers and acquisitions activity and sustained consolidation campaigns from the strongly financed players. Osisko Gold Royalties is perhaps Québec's prime example of that and the company wasted no time by financially backing Oban Mining. Oban completed several deals over the last 18 months, including the acquisitions of Eagle Hill, Corona Gold, Ryan Gold, Northern Gold and, more recently, NioGold.

Moreover, in their own ways, other gold juniors, such as Eastmain Resources, Midland Exploration and Balmoral Resources, are also finding their way to success. In fact, Balmoral's story is quite unique within Quebec's mining landscape. The Vancouver-based company has won the AEMQ's prestigious "Prospector of the Year" award twice in consecutive years, for two completely different types of assets: in 2013, with its gold Martiniere property, and in 2014, with its Ni-Cu-PGE Grasset discovery. This project lineup and quality makes Balmoral stand out from the crowd: "We have an experienced crew of dedicated explorers: this is our craft, and we do not pretend to be anything else. During these difficult years, we have managed to reach out to the markets and attract that crucial funding everyone needs. However, we have also been courageous enough to consistently spend that on drilling programs, knowing that the money was high-risk both for the investors and for the future of Balmoral itself. Luckily, we succeeded in giving our shareholders a great 2014 with our Grasset asset, while diversifying our portfolio. Now that nickel prices are down, we are shifting our attention to our gold Martiniere property, which has kept growing since 2013. Ultimately, we are explorers and our job is to create value for our shareholders, irrespective of the commodity," said Darin Wagner, president and CEO of Balmoral Resources.

Meanwhile, two other gold juniors, Integra Gold and Falco Resources, also stand out from the crowd. While their strong financial positions are impressive, their projects also share a different key characteristic that truly enforces their positions as gold junior leaders. Both Integra Gold (Lamaque South gold project) and Falco Resources (Horne 5 project) have their proprieties adjacent to two of the world's most revered gold mining towns, true symbols of Québec's mineral industry: Val D'Or and Rouyn-Noranda.•



- Quality asset base in safe, mining friendly jurisdictions, and favourable Canadian dollar exposure
- Growing production profile: 2016 forecast of 87,000 to 97,000 Au ounces
- Strong cash position and capital structure:
 CAN\$61 million* in cash, minimal debt and low share count of 58 million
- Island Gold Mine PEA highlights potential for increased production and lower All-In-Sustaining Costs
- Track record of success 35 years operating in Canada

* As of March 31, 2016



www.richmont-mines.com

From Abitibi – Témiscamingue to the World

A Tale of Two Mining-Towns

Since its discovery in 1901, the Abitibi Greenstone belt, shared by Ontario and Québec, has generated over 170 million oz of gold production. The mineralization is rich beyond doubt, but a bigger resource, one that is more sustainable and more beneficial to the regional and national economy of Canada, is increasingly affirming itself on the Québec side of the belt. Over the past 10 years, in the historically symbolic mining-

towns of Val D'Or and Rouyn-Noranda, local service companies have developed such a tremendous amount of human expertise that they are now influencing mining practices around the world.

Indeed, this knowledge base and mining tradition were built locally. Val D'Or's historic Sigma and Lamaque mines operated for 75 and 52 years respectively, producing a total of 9 million oz of gold, before shutting down

in 1985. In more recent times, the service

in 1985. In more recent times, the service expertise was developed by assisting mines such as Hecla Mining's Casa Berardi (200 km north of Val D'Or), Agnico Eagle's Goldex (Val D'Or), and the Canadian Malartic Complex (20 km west of Val D'Or).

Now, Integra Gold, one of Québec's strongest gold juniors, is marking yet a new revival of the town's mining production, with its Lamaque South gold project and its recent acquisition of the Sigma/Lamaque milling complex and mines: "On the Lamaque South gold project, Integra Gold went from 735,000 oz indicated and inferred in late 2013, to 1.673,000 oz indicated and inferred in late 2015. Moreover, late 2014, we acquired the Sigma-Lamague complex and mine out of bankruptcy, with the purpose of securing the mill. Our original plans did not include exploring the old mining operations but upon further study, we realized that we had also inherited 75 years' worth of mining and exploration data which had never been utilized," said George Salamis, executive chairman of Integra Gold Corp.

"We decided to run a crowd source analytical challenge and so we open-sourced all of the data. This had been previously done by Goldcorp in 2000, but this time around, the amount of data was far bigger and the means available for processing it were far more advanced. We benefited greatly from associating ourselves with HeroX, a crowd-sourcing platform for incentive prizes, to discover complex, innovative solutions to the challenges facing companies, governments, nonprofits, and individuals. So HeroX helped us bring multidisciplinary teams together,





which cross-pollinated their expertise to come up with the best data-processing ideas. The two winning submissions were a mix of traditional geological thinking, with machine learning and artificial intelligence," explained Salamis.

Integra gold Corp is also benefitting from their partnership with local engineering company, Fournier & Fils, as Jérémi Fournier, VP operations and logistics explained: "As service-sector entrepreneurs with a lot of tradition in the mining region of Abitibi-Témiscamingue, Fournier & Fils could not just stand aside and hope for the best on the part of the juniors, and the producers. Instead, during these difficult times, we have tried to pro-actively develop new business approaches: this is what happened with Integra Gold Corp, when we jointly acquired the former Sigma mine camp, which included all the waste rock on the property for future revaluation. Fournier & Fils is aware that it cannot open mines by itself, but it can strive to be a true partner for its mining clients, and to be there for them in whichever way it can because ultimately, their success is our success."

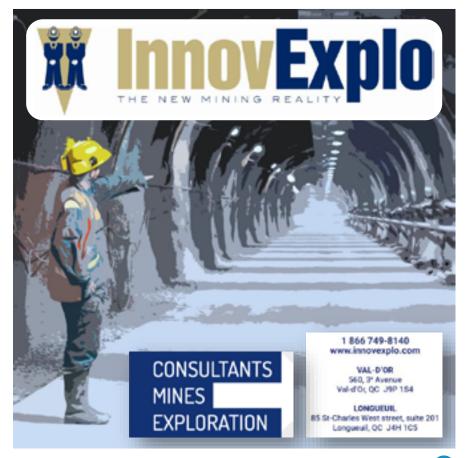
InnovExplo, a Val D'Or consultancy founded in 2003 by Alain Carrier and Carl Pelletier, has also been consistently supporting Integra in recent years. "The mining market is still difficult, but we are involved with the important projects happening in Québec, like Integra Gold Corp's Sigma-Lamaque. Over the past years, InnovExplo has been growing, increasing its number of employees and hiring senior staff. This increase has allowed us to now add complete feasibility studies to

our service offering," mentioned Carrier.

That said, InnovExplo is not restricting itself geographically: "Most notably, however, over the past two years, we have been able to enter the African market, where we are active in countries like Mali, Côte D'Ivoire, and Mauritania. In Senegal we were called upon to provide training and short NI 43-101 regulations courses," explained Carrier.

Denis Gourde, InnovExplo's engineering and

sustainable development VP, completed: "In Mali, we are working directly with an African client, overseeing an operation which was initially closed down in 2012. We are helping the operation completely relaunch itself, from drilling planning, to resource estimates, to mine design, and even coaching staff for the operational phase. The owners are open to consulting Canadian expertise in order to turn the project into a success.





InnovExplo comes from the right place and has the right methodology."

The favorable local gold market activity, amplified by internationalization opportunities, is helping out local companies and Malartic-born contractor CMAC-Thyssen Mining Group has taken full advantage of that: "CMAC-Thyssen can serve its clients throughout the entire mine planning and construction process and, over the last years, we have hired over 400 people, for a total of

600 employees today. This was made possible by our producing partners, which, in Abitibi, have been accelerating their projects recently, notably in the gold sector. The vast majority of our business consists of servicing clients, but we also have a smaller portion dealing with equipment manufacturing. This has enabled us to expand internationally and broaden our portfolio. Currently, we are active in over 15 countries abroad, with a focus on French-speaking Africa," said Luc

Guimond, president of CMAC-Thyssen Mining Group.

Naturally, the focus of most of Abitibi's service providers is West Africa. Ghislain Blanchet, executive VP of CMAC-Thyssen Mining Group, explained why: "Francophone countries like working with us due to the cultural similarities we share, but also because they realize the level of underground mining expertise we possess as Québecers. For us, French Africa and Morocco, in particular, is the next big market."

Just 65 miles east of the entrepreneurial Val D'Or, another town proudly boasts its mining tradition: Rouyn-Noranda. And while a rivalry clearly exists between the two, there are more similarities that bring them together than differences to set them apart. Since its discovery in 1923 until its shutdown in 1976, Noranda's Horne gold mine produced 11 million oz of gold, while the entire regional Rouyn-Noranda mining camp accounted for an additional 8 million oz.

The industry's service sector players have thus developed tremendous expertise, which has been leveraged since to assist the Greenstone belt's mines, the same that Val D'Or's companies have been helping.

Blais Industries is one of Rouyn-Noranda's reference-points; a family-business dating back to 1952. Over the last 38 years, the company has enjoyed a close collaboration with the historical Horne Copper Foundry (Glencore); Canada's only facility of its kind, which has been active in town since 1927. Having worked on almost all of Québec's major mining projects, Blais Industries is now expanding abroad: "We have worked on projects in Mexico, Namibia, Russia, and



BUILT ON EXPERIENCE. FUELLED BY EXPERTISE.

For more than 35 years, BBA has been helping industrial clients transform complex problems into practical, innovative and sustainable solutions.

Recognized for its extensive field experience and cutting-edge expertise, BBA delivers a comprehensive range of consulting engineering services, from studies and asset integrity plans to commissioning and operational support.

With offices from coast to coast, BBA is synonymous with proximity and agility.

Engineering for a changing world

bba.ca



Burkina Faso. That said, we want to expand wisely, and not sacrifice quality for quantity: unrealistic targets and mismanaged expectations have hurt the industry," said Jean-François Blais, executive officer for business development at Blais Industries.

"The industry is going through a long downturn and exploration work has suffered as a result. Over the past couple of years, some companies have been looking at the lowest cost options in terms of service providers and overall, that is not beneficial to anyone, since most of the time, the quality is absent," said Richard Aubé, regional manager at Major Drilling, one of the largest drilling service companies in the world.

"As service sector entrepreneurs in Abitibi, we have tried to proactively help our mining clients overcome obstacles."

- Nicola Fournier. Vice President. Sales & Technical Services. Fournier et fils



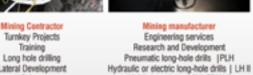
HEALTH AND SAFETY . QUALITY . EQUIPMENT . PRODUCTIVITY



Lateral Development

Raises

Shaft Sinking



Phone: +1.819.874.8303 / Website: cmac-thyssen.com / Facebook: cmacthyssen / Email: info@cmac-thyssen.com

Mobile long-hole drill | SPLH II

Drill Handling Arm | DHS



HATCH

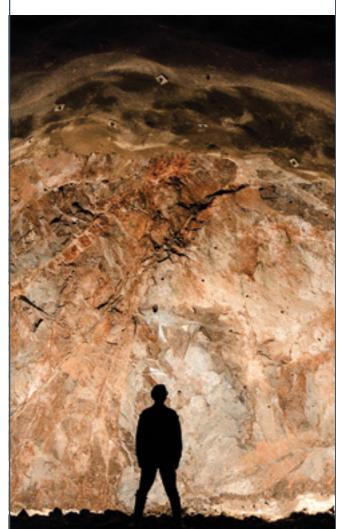
+

We embrace your vision as our own.

Your challenges are transforming the way you do business. We understand that your needs are changing rapidly and that you need a partner who is proactive in identifying the larger, long-term issues affecting your business.

Welcome to a new era. Together we can build positive change.

Contact us at hatch.com



Headquartered in New Brunswick, Major Drilling expanded significantly in Québec in 2011, when it acquired Rouyn-Noranda's Bradley Group, and throughout Canada in 2014, when it took over Taurus Drilling, thus gaining access to the underground percussive market. "We know the market is going to return and Major Drilling has the advantage of being financially strong and capable of investing in expanding its portfolio, even during the downturn. This helps us strategically position ourselves for the upturn," mentioned Aubé, a professional with over 35 years of experience with both underground and surface drilling operations.

Tradition seems to be the key-word in Rouyn-Noranda, and the town's other major family-owned business is Moreau, a construction company that has grown since its inception in 1977 to have over 1,200 employees today, generating an annual revenue of over C\$200 million. Entities such as Moreau, heavily active in Nunavik, show that the Abitibi-Témiscamingue serves as the center of mining expertise and gateway to the north of Québec, despite the 1,000 miles that separate the regions.

While unlocking the north will prove rewarding one day, intriguing developments are presently occurring in the heart of Rouyn-Noranda itself. In 2012, Falco Resources, another strongly-positioned gold junior, entered the scene and bought 70% of the historical Rouyn-Noranda mining camp, determined to make good use of the 300,000 m historical drilling and exploration done by Noranda Inc. After 17,000 m of its own drilling and the digitalization and compilation of historical data, in early 2016, Falco Resources boasted 5.36 million oz of gold indicated and a further 1.25 million oz inferred for its Horne 5 gold project. "We now know that Horne 5 is eligible for exploitation as an underground bulk tonnage mine. This will enable us to process more than 10,000 mt/day at the mill when operational, essentially making this one of the biggest underground mines in North America. There are so many elements both in the OPEX and in the CAPEX that can be improved, and all of those are opportunities for us to increase the attractiveness of our project. Horne 5 is situated in an industrial park and so we will tap into the town's electrical power infrastructure and its municipal services. Finally, we will benefit from having all those exceptional service providers as neighbors. These factors will help us reduce costs. Rouyn-Noranda stands as a global reference point for gold mining – we could not be in a better place," said Luc Lessard, president and CEO of Falco Resources.

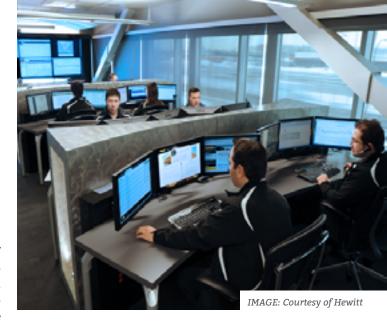
With an international career of more than 25 years in the industry, during which, among other accomplishments, he oversaw the design, construction, and commissioning of Canadian Malartic's gold mine, Lessard is confident about Québec's mining future: "There is strong support for mining in this province and Falco Resources is proud to be here. The people and the government are on board, and we have a longstanding tradition of mining excellence. I strongly believe in Québec."

Innovation and Smart Design

Mining's New Ideals

Irrespective of their target commodity prices, over the last years, miners have learnt the hard way that controlling their costs is essential in today's extremely competitive environment. From EPCMs, to consultancies, to drilling companies, to equipment providers, everyone is striving to be ahead of the game, coming up with innovative cost-optimization methods.

Equipment-providers are traditionally known for having a rather conservative business model; selling and maintaining machinery. But more and more, technology is added nowadays into their product and service offering. David Hewitt, VP of Resource Industries at Hewitt Equipment, CAT's exclusive Québec dealer, explained: "In this cycle, our customers need us to help them extend the lives of existing fleets and drive down their costs. Our gold mining partners are looking at new technological opportunities, such as autonomous vehicles. In fact, in March 2016, Hewitt Equipment was the first in Canada to commission an underground autonomous CAT loader. Many discussions were carried out regarding the usage of more analytics for machine



performance improvements underground, an aspect that has always been a challenge for the sector. There are plenty of data-streams nowadays, but there is a gap in the proper utilization of them. Furthermore, we are also performing more machine and component rebuilds, giving second and third lifecycles to underground equipment, an aspect which CAT prides itself on."

Having managed to keep its 2,200 workforce fairly intact during these last challenging years for the industry, Hewitt Equipment, strongly backed by CAT, is now spearheading the remodeling of the traditional equipment provider concept: "There are many new products and programs in the market, but the key is to use them correctly and Hewitt Equipment is at the forefront of CAT's global efforts. We were among the first five dealers worldwide to undergo the condition mon-



"The Saguenay-Lac-Saint-Jean region needs a project like Lac à Paul badly. The logging, and the pulp and paper industries were once the economic drivers there, but that is not the case anymore – many of these businesses are shutting down. In 2015, Arianne Phosphate was invited by the government to the "Sommet Economique Régional du Saguenay–Lac-Saint-Jean", which was chaired by Québec's Premier, Philippe Couillard, and the message was clear: let us look at mining as a solution. In the end, this project is going to help Québec: we will create 2,200 jobs during the construction phase of Lac à Paul, and then generate 1,000 direct and indirect jobs during its operation."

- Jean-Sébastien David, Chief Operating Officer, Arianne Phosphate

itoring pilot programs, and our fluid analysis lab is within the top five most certified facilities within CAT's global network. Our end goal is to help clients succeed, because we believe that by making their operations more efficient, in the long-term, they will give us more of their business," added Hewitt.

Atlas Copco is also seeking for and applying ways of limiting costs, for example in the drilling segment as Reg Labelle, national sales manager Québec and the Maritimes, Atlas Copco Mining and Rock Excavation explained: "One of the other innovative solutions we are already utilizing successfully in the north of Québec is surface teleremote drilling. The ultimate goal for that is to have one operator running three machines and that is the kind of innovation that the younger mine managers out there are looking for. More and more,

projects are getting developed in remote locations, and the costs associated with transporting, lodging, and feeding personnel there are very high. Consequently, getting one person to perform the job for three generates tremendous cost savings. These sorts of automations allow companies to drill through shift changes, eliminating the downtime while getting people down in and out of the mine. We have estimates of 30-40% increases in productivity as a result of this, and this is something we are implementing not only in Québec, but all throughout Canada. Another factor we are helping with is related to human exposure to the areas with very high rock temperatures of 40-50 degrees Celsius that exist at those depths: being able to remotely control machinery is essential in solving that".

The idea of increased efficiencies and technological input is so influ-

MAIOR

Partenaire sur le terrain Partners on the Ground







V=QR²

Valeur = Qualité, Relations, Résultats Value = Quality, Relationships, Results

PEU IMPORTE L'ENDROIT PEU IMPORTE LE MOMENT

Nous avons la flexibilité qui nous permet de répondre aux besoins des clients. Nos gestionnaires et les membres de nos équipes sont des adeptes de la résolution de problème, ce qui permet à nos clients d'économiser du temps et de l'argent.

Partout dans le monde, l'équipe responsable de la sécurité chez. Major Drilling s'engage à faire en sorte que chacun de nos employés rentre chez lui chaque jour sans accident.

NO MATTER THE PLACE NO MATTER WHEN

We have the flexibility that allows us to meet the needs of customers. Our managers and the members of our teams are adept at problem solving, enabling our customers to save time and money.

Around the world, Major Drilling is committed to ensuring that every employee goes home safely every day.

Richard Aubé

Gérant Régional Rouyn-Noranda, Québec Regional Manager Rouyn-Noranda, Québec Tel: +1-819-797-0755 (ext. 332) Cell: +1-819-290-9352 richard.aube@majordrilling.com www.majordrilling.com

ential that some companies, such as Hatch, went as far as reinventing themselves on the basis of smart design. "We are now entering a new era for Hatch, which will mark our return to the core, innovation-based values that this company was founded on. Project execution has traditionally been a key area of focus, but we have seen that more and more companies are calling for innovation and smart design nowadays. What is needed is a step-change, and not the continuous improvement of existing models. The industry is asking for a whole new level of commitment and evolution, and throughout the super-cycle, R&D was not necessarily in the spotlight: priority was given to big CAPEX projects, and delivering those on time by employing traditional engineering methods. With Hatch's new era, we are going back to innovation expertise and leveraging our global network of specialists, asking them to work cross-industrially. Our partners want us to treat their money as if it were our own [...] They encourage us to come with riskier, more-technologically prone solutions that they can analyze and decide whether to pursue or not. Hatch has a dedicated Technology Group which focuses exclusively on developing new processes and methods that we patent and sell to our customers. We also work directly with our partners to create customized-solutions for them, which we can then potentially apply to new business cases afterwards," said Martin Dionne, director for Iron Ore and Metal Powders at Hatch, one of the biggest EPCMs in the world and one of the consistent winners of Canada's Best Managed Companies.

"This new era for Hatch represents one of positive change, and the philosophy behind that is to not only emphasize the execution-quality, but also our employees' motivation for performing on a project. We encourage introspection and, since engineering shapes our future, we want to make sure we are doing things for the right reasons, taking into consideration the overall social impact that we will have. We want our legacy to benefit everyone," added Dionne.

Given the moderate optimism displayed by Canada's mining markets over the last months and the hard lessons learnt during one of the longest down-cycles in recent history, perhaps Hatch's "Positive Change" slogan will come to represent the modus vivendi of the entire industry, reborn and redesigned for success. •



The New Standard For Lithium-ion Batteries Lithium Hydroxide

Whabouchi Lithium Mine to Power the Future

TSX-V: NMX, OTCXQ: NMKEF, Frankfurt: N0T www.nemaskalithium.com info@nemaskalithium.com





Conclusion

Leading by Example

In no way can the effects of the global mining downturn be overlooked or minimized. Despite the recent positives signals in Canada, it would be risky to say that the industry has passed the final hurdle: even if the upturn is truly around the corner, it will take time for the whole sector to heal and benefit from it. But once it does, it will be stronger than ever.

"The mining market is still a difficult one and the situation will not change soon. Even if the commodity prices go back up, it will take quite a long time for the industry to come back as well, since it is so capital reliant," stated André Allaire, president of BBA, a Canadian engineering company with a long-lasting tradition in the mining sector. "Mining still represents about 50% of BBA's business, but recent market conditions have led to us focusing on sustaining capital costs and the optimization of existing operations. Things are changing and we are seeing more synergies between our mining and energy departments. Power efficiency is currently a key item, especially with remote operations, and BBA is helping companies by integrating wind and solar energy solutions on those sites, improving productivity and reducing carbon footprints," explained Allaire, who has seen BBA expanding across Canada in recent years and consist-





osler.com

Osler, Hoskin & Harcourt LLP

infrastructure matters. It's law that works.

OSLER

ently being placed among the country's best managed companies.

"BBA is now seeing more activity happening with front-end studies and there seem to be more opportunities coming up in Canada now with gold and special metals, so we expect moderate optimism to dominate the market in 2016," concluded Allaire.

Without a doubt, the planet will continue to eat more, build more and innovate more and, from cloud-breaking skyscrapers, to burgers, to the lithium ion cells that power electrical cars, everything in the value chain is dependent on mining, whether we are considering iron, phosphate, or lithium. "Domestically, I believe opportunities are going to come from the additional demand for commodities and also from innovation and new technologies, whether we are talking about exploration methods or processing methods," said Nicholas Nickoletopoulos, President & CEO, Urecon, a producer of preinsulated pipes.

Québec is one of the most mature and experienced mining jurisdictions in the world and this comes with a trade-off; but here, the positives vastly outweigh the negatives. Yes, La Belle Province is not a cheap place to mine in, but its service providers, like those from Val D'Or and Rouyn-Noranda, are some of the best in the world, and they will get the job done right from the outset, generating long-term cost efficiency. Yes, Québec has more regulations and is more sensitive to community relations than most other jurisdictions, but no coup d'état will endanger a project here. Furthermore, authorities, when feasible, will put in a real shift to help miners see their projects become reality (just ask Agnico Eagle, Stornoway Diamonds, or Nemaska Lithium). And yes, Québec still needs an infrastructural network to develop its far north, but, at the same time, companies like Integra Gold and Falco Resources are reviving important historical mining sites adjacent to fully developed and serviced municipalities.

So what can Québec achieve during this transition period from downturn to upturn? Well, what it has been doing already – to innovate and to lead the world's miners by example, across the various layers of its industry supply-chain. Québec is in the sector's driving seat: as it should be. •



Québec Mining 2016

Project Director: Ty Jeevaratnam
Journalist: Razvan Isac
Editor: Mungo Smith
Graphic Designer: Inanc Duman

Our full 2016 Québec Mining Report will delve deeper into the ways through which companies across the industry's value chain are finding new and resourceful methods to advance their technology and projects, which ultimately might influence the global mining industry.

If you are interested in participating in our research, please email the editorial team at ty@gbreports.com

Cover Photo: Courtesy of Arianne Phosphate

www.gbreports.com





GLOBAL BUSINESS REPORTS