GLOBAL BUSINESS REPORTS
INDUSTRY EXPLORATIONS

B.C., YUKON AND VANCOUVER AS THE WORLD'S MINING BAROMETER

2017

Mining & Exploration in BC - Innovation - First Nations
Yukon Mining & Exploration - From Vancouver to USA & Mexico

Dear Reader,

We are happy to present Global Business Report's (GBR's) Industry Explorations ***British Columbia and Yukon and Vancouver as the World's Mining Barometer 2017***.

This year has been a turning point for the mining sector globally and where better to begin 2017 than in Vancouver, the World's Mining Barometer, to analyse the pickup in the global exploration playground for our international readers.

Through extensive interviews with executives based in Vancouver and operating in British Columbia, Yukon, Mexico and USA, we had the opportunity to understand the strategies that decision makers had taken to survive the last few years and the trends they are betting on for the year to come.

At the AMEBC's Roundup in January, optimistic geologists predicted that the copper price would increase by 20% by the end of the year, a figure that today looks probable. Along with improving market conditions, British Columbia has seen a resurgence, particularly in early stage exploration. Those lucky enough to have further developed projects attracted attention from Toronto investment houses and international mining companies, specifically in the North West where golden child Pretivm poured its first gold bar at Brucejack in June.

Following Goldcorp's acquisition of the Coffee Project, there was a domino effect in Yukon during the first half of 2017, which saw majors investing into an array of gold projects. The region has benefitted from technological developments, a pro-mining government and increased gold prices, and two new mines are soon set to begin production, in addition to Capstone's copper Minto which has just a few years of mine life left. The region now boasts investment from Kinross, Barrick and Agnico Eagle, to name a few.

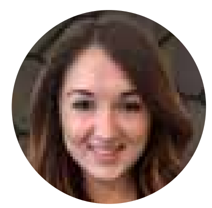
During our research, it was key to gauge the level of confidence from the financial community. Evidently, projects seeking smaller investments had challenges knocking at the doors of financial institutions, compared to investors such as Eric Sprott who invested US$20 million into Ascot's Premier property. Alternative financing and an uptick in retail investor activity was helpful for those who started to put drills in the ground this summer, and market performance has overall been stable.

Vancouver is home to the majority of the globe's juniors and many major mining companies, all of which benefit from easy access to investment as well as a high quality of life. Whilst many remain within the Canadian border, we also caught up with previous interviewees who had ventured south to the USA and Mexico, which are favoured for their faster permit processing times and untapped potential. Across the board, companies have created innovative strategies to mitigate risk and accepting a 'new normal' in the industry, as we will explain in the following pages.

Please share with us your feedback on the report with an email to apascoletti@gbreports.com or end a tweet @gbreports.

Enjoy the read!

Project Director
Laura Brangwin



Mining in B.C.

A guide to the province's producing operations, First Nations relations and innovative operating solutions

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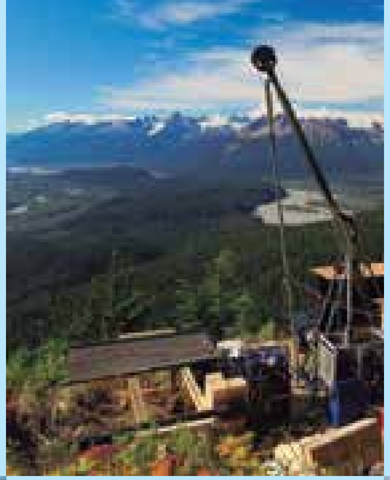

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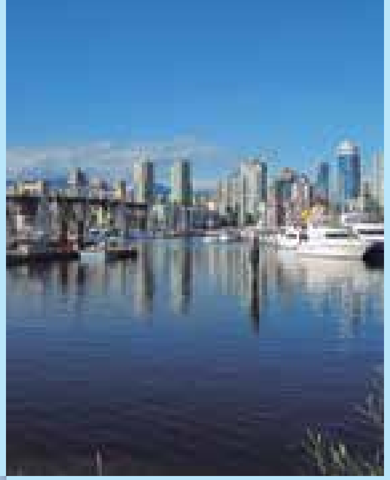

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Analysis of an increase in exploration activity for the province

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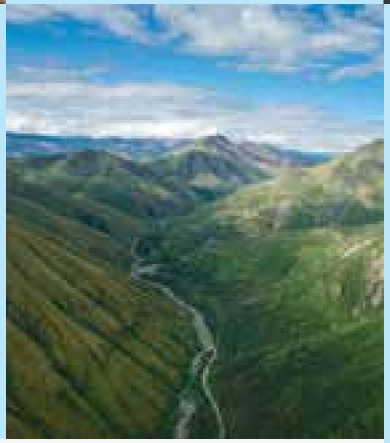

Vancouver: North America's Mining Hub

Investors are looking south for opportunities

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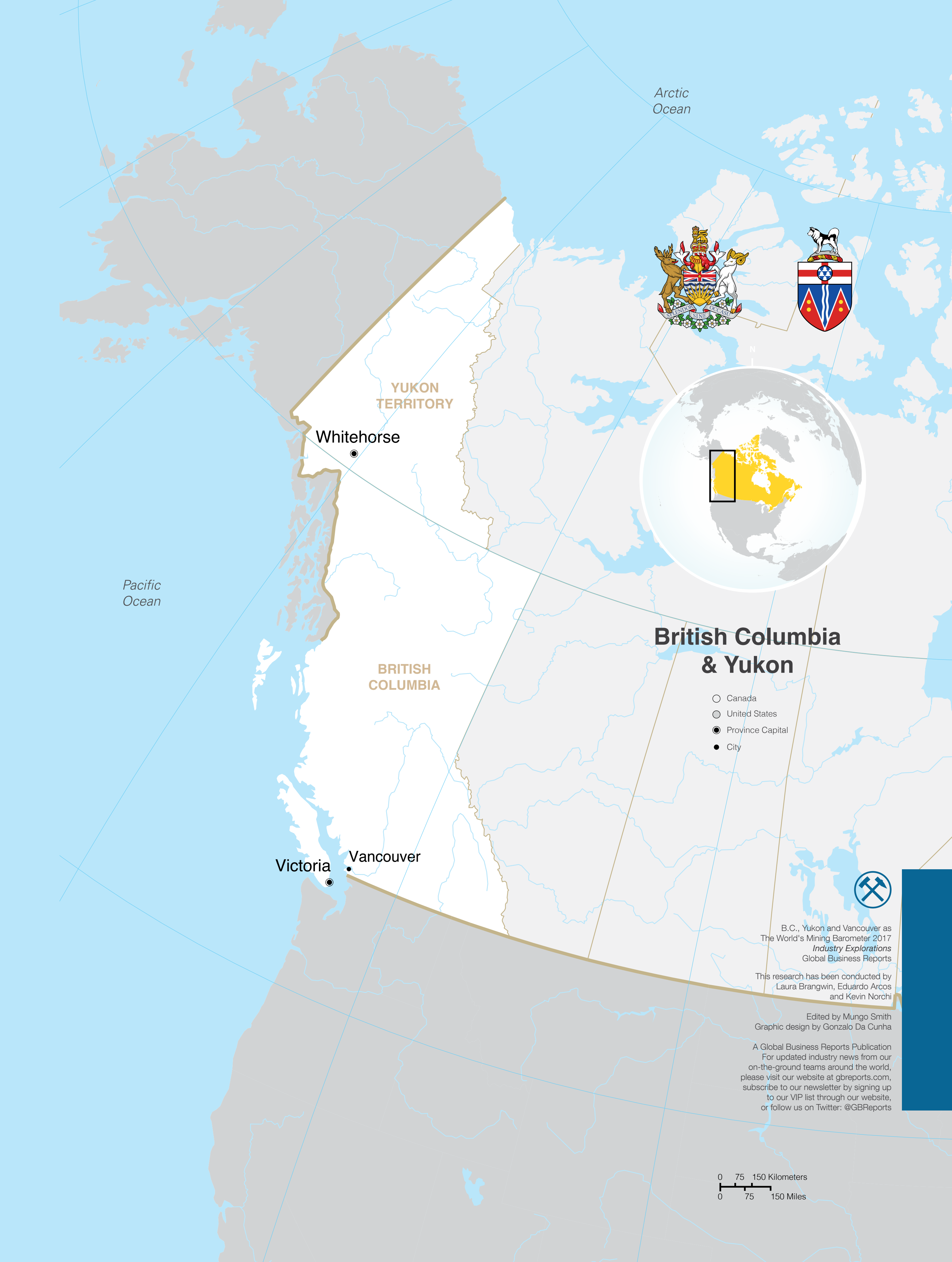

B.C., Yukon and Vancouver as The World's Mining Barometer 2017
Industry Explorations
Global Business Reports

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Image courtesy of Motion Metrics

MINING IN B.C.

"British Columbia is one of the most transparent, fair and rigorous jurisdictions in the world… If the government could help with the financing of infrastructure to access ore projects, it would make many more projects feasible, as they sometimes require billions of dollars in development capital. Other than that, I do not think there is much missing in B.C."

- Robert McLeod,
president, director and CEO, IDM Mining

An Introduction to British Columbia

An abundance of skills and a rich geology should ensure a sustainable recovery for mining in Western Canada

Commodity boom and bust cycles over the past decade have made investors in the mining sector increasingly wary. Whereas as recently as 2011 majors and juniors would fearlessly embark on property acquisitions overseas – often overlooking geopolitical risks and long-term economic hurdles – they are now in the hunt for projects offering safety and certainty to their investments. It is under this paradigm change that British Columbia (B.C.) has re-emerged as one of the world's most attractive mining jurisdictions. According to the annual survey of mining companies conducted by the Fraser Institute, B.C. ranks 27 among the world's most attractive jurisdictions for investments, beating world-renowned mining destinations such as Colorado, Chile or South Africa.

British Columbia has no shortage of mineral wealth: it hosts vast gold and copper porphyry deposits, together with equally impressive coal, silver, and nickel reserves. Moreover, B.C. is the only Canadian province hosting molybdenum deposits. This mountainous province offers a favorable legal framework, competitive and improving infrastructure, a highly skilled labor force, and a stable political and economic environment. These strengths are contributing to renewed interest in the province, as companies based in B.C. and the rest of Canada look back home for opportunities under new market conditions.

Completion of long-awaited infrastructure projects during the downturn years has also contributed to an uptick in exploration activity in the province, mainly the Northwest Transmission Line and the Iskut extension, which has resulted in major developments in the so-called 'Golden Triangle' of northwestern B.C., which hosts some of the most attractive mining projects in North America. These developments have boosted competitiveness in some of B.C.'s most remote regions by drastically reducing operational costs. However, exploration is not confined to the Golden Triangle. In the Highland Valley area, home of the great copper porphyry deposits that B.C. is traditionally known for, several noteworthy projects are gaining traction. Huge exploration potential lies in the province: only 0.05% of land in B.C., a province roughly as large as Nigeria, is used for mining purposes, evidencing the immense potential for the industry.

Like every other mining jurisdiction, British Columbia faces its own issues that could deter investments, namely disputes with First Nations over land tenures, but also water permitting and compliance with environmental regulations. Although the industry could hardly be described as buoyant, clear signs of a turnaround have emerged. Through infrastructure developments and highly automated operations at mining sites, British Columbia has proved that the right elements are in place to compete with any other jurisdiction. Furthermore, B.C. serves as Canada's gateway to Asia, still the fastest-growing region in the world, and the main driver of commodity consumption for years to come. From legislation to market performance of British Columbia's main commodities, we identify a favorable change in tide for the mining sector in this Pacific coastal jurisdiction, where immense potential still lies.

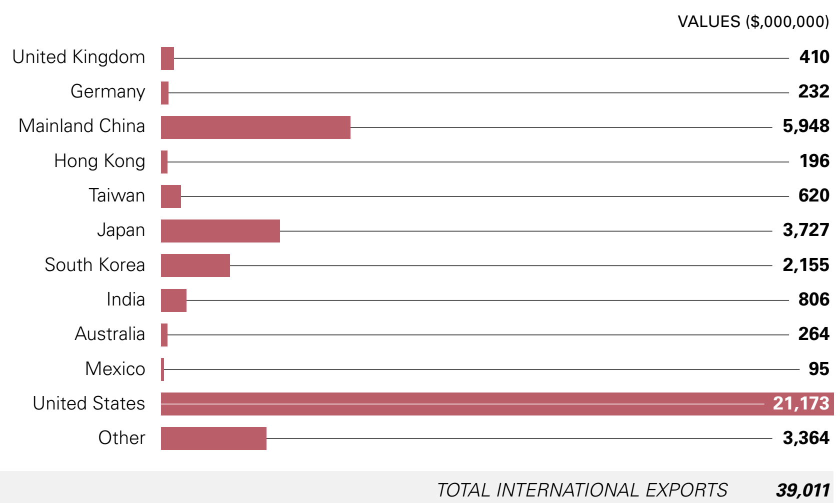
BRITISH COLUMBIA AT A GLANCE

Source: IMF

Capital: Victoria
Population: 4,648,055 (2016)
Head of Government:
Premier John Horgan (NDP Party)
GDP: $250 billion (2015)
GDP growth:
3.7% for 2016 (Statistics Canada)
Real GDP Growth:
3% for 2017 (estimate)
1.8% for 2018 (estimate)
GDP Per Capita: $49,286 (2015)
Unemployment rate: 5.6% (May 2017, Statistics Canada)
Total Mining Sector Employment Figures: 38,155
International exports (% of GDP): 22.1 (2015)
Mining, quarrying and oil and gas extraction growth of 3.3% in 2016
Exports: $39 billion (2016, BC Stats). Wood products, metallic mineral products, energy products, machinery and equipment, pulp and paper products.

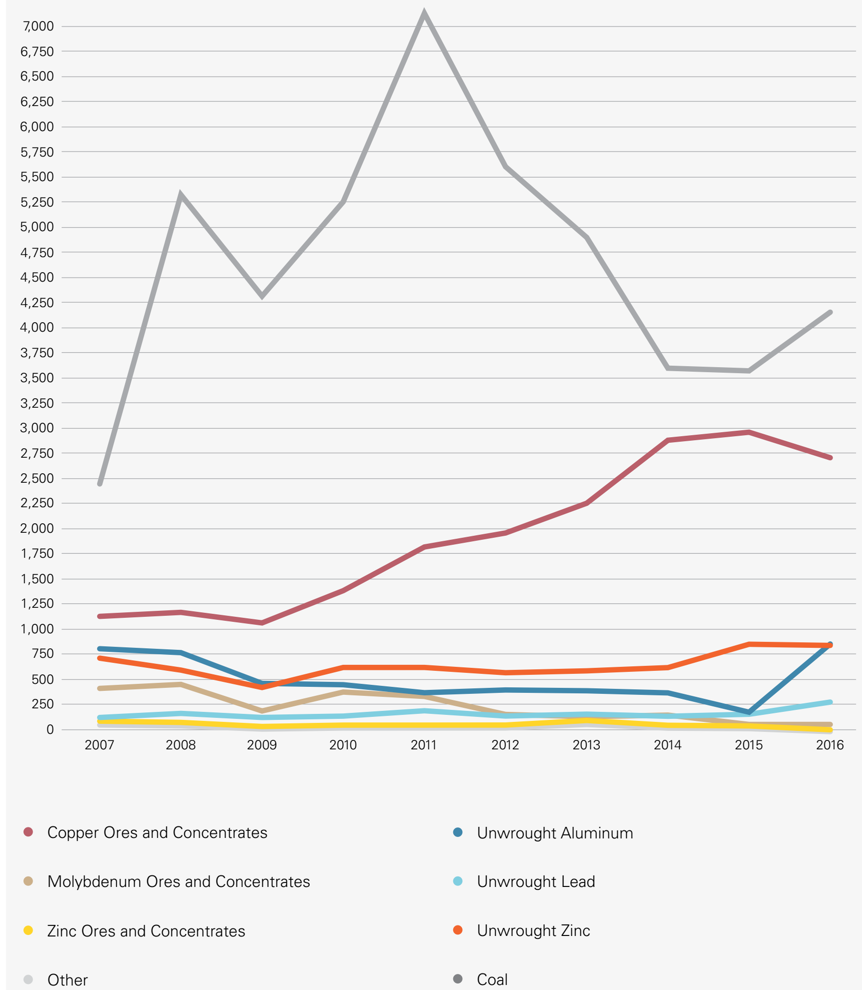
BRITISH COLUMBIA'S MAIN EXPORT MARKETS (2016)

Source: BC Stats

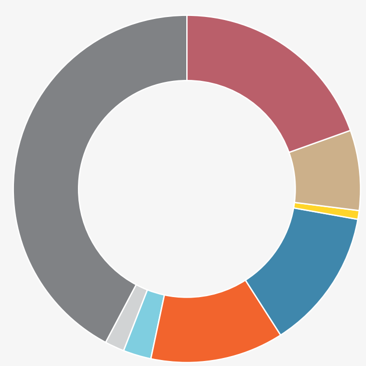


MINERAL PRODUCTION ($ millions)

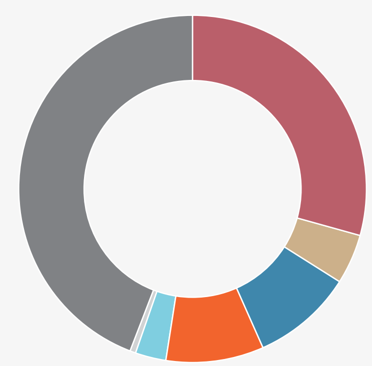
Source: BC Stats



% OF TOTAL 2007



% OF TOTAL 2016



Bryan Cox

President and CEO
MINING ASSOCIATION OF BRITISH COLUMBIA

Could you give an example of how the MABC supported operators in readjusting during the downturn?

BC: During the downturn, a number of our sites had to make the difficult decision of ceasing to operate due to commodity prices. These decisions are difficult because they not only affect the company but they also affect workers, their families and the communities where the activity takes place. In late 2015, after a significant drop in prices for our primary commodities (metallurgical coal and copper), our members came together to identify a common strategy to avoid further impact. It did not take long to identify opportunities to work together. The result of these discussions was the establishment of a 5-year deferral payment plan option for electricity costs depending on commodity prices; the deferral program includes commercial interest. This program greatly helped mines to continue operating and avoid further workforce reductions during the downturn.

Could you provide an insight into the importance of the coal industry to British Columbia and the current state of the market?

BC: We remain one of the primary exporters of steelmaking coal in Canada - it is one of the principal commodities for B.C. With the downturn in the coal industry, production did decrease, as four mines in the Northeast went into care and maintenance between 2014 and 2015. Two out of the four mines are now operating again, bringing hundreds of jobs back in that region. We say that 'mining builds communities' and in this case, we can see how that becomes a reality. There remains potential for coal projects to become coal-making mines in the near future. Considering the role that steelmaking coal makes to society's transition to a lower carbon economy – from transit to infrastructure to wind turbines – the future for steelmaking coal in B.C. looks bright.

The public remains concerned about the environmental impact of the mining industry following the Mount Polley disaster. What role does the association have in addressing these concerns?

BC: The breach at the Mount Polley mine was a significant incident and we fully acknowledge its impact; this is not something that happens every day. Immediately following the incident, our members took the necessary steps to ensure information was being shared with members of the community and the general public about tailings facilities at their sites. Understanding the root cause of the Mount Polley incident provided important learnings to improve the regulatory framework in B.C., however, we also learned about the importance of sharing information with the general public. Today, all information related to tailings facilities is available online; this is an important step toward transparency and accountability not only for industry but also for government.

What are the opportunities for British Columbia's mining sector for 2017?

BC: Are we facing the beginning of the new cycle with things improving? Absolutely, there is a lot of optimism although commodity prices remain volatile. Do we have the opportunity to grow and be a key economic driver for British Columbians? Absolutely, there is no doubt that will happen.

We had a provincial election and now have a new government. This provides for an important opportunity to have a meaningful conversation about mining in the province; a discussion that acknowledges the contributions this industry has provided, continues to provide and will provide into the future to the citizens of BC, especially considering that mining contributes to a low carbon future.

MINES IN BRITISH COLUMBIA

1. Highland Valley Copper, Logan Lake
2016 Revenue: $750 million
Produces: Copper, molybdenum
Proponent: Teck Resources
Status: Operating
Mine Life: to 2026
Type of Operation: Open Pit
Summary: Highland Valley Copper, located in south central British Columbia, Canada, produces copper and molybdenum concentrates through the process of autogenous and semi-autogenous grinding and flotation. The crusher relocation project, increasing access to over 30 million tonnes of reserves, was completed in 2015. Teck has a 100% interest in the mine.

2. Gibraltar, Williams Lake
Produces: Copper, molybdenum
Proponent: Taseko Mines Ltd.
Status: Operating
Mine Life: 22yrs (from 2015)
Type of Operation: Open Pit
Summary: Gibraltar, Taseko Mines Limited 75% owned copper-molybdenum mine, is located near Williams Lake in central British Columbia, Canada. It is the second largest open pit copper mine in Canada and the fourth largest in North America. The reserve consists of 3.1 billion lbs of copper and 55 million lbs of molybdenum.

3. Red Chris
2016 Revenue: $295.3 million
Produces: Copper, gold
Proponent: Imperial Metals
Status: Operating
Mine Life: to 2043
Type of Operation: Open Pit
Summary: Red Chris Mine, which consists of 77 mineral tenures, is located in northwest British Columbia, Canada and produces copper and gold. The mine's ownership and operation correspond to Red Chris Development Company Ltd. (RCDC). The production target for 2017 is 85-92 million pounds copper and 40-45,000 ounces gold.

4. Mount Milligan
2016 (October- December) Revenue: US$55.4 million
Produces: Copper, gold
Proponent: Thompson Creek Metals Inc.
Status: Operating
Mine Life: 24 years (from 2014)
Type of Operation: Open Pit
Summary: Mount Milligan is located in Mc Load Lake, between Mackenzie and Fort James, in in central British Columbia, Canada. Centerra Gold acquired the mine on October 2016. It produces copper and gold and possesses 256,847 tons of proven Cu/Au reserves and 239,362 tons of probable reserves.

5. Huckleberry
2016 Revenue: $62.766 million
Produces: Copper, molybdenum
Proponent: Huckleberry Mines Ltd. / Imperial Metals
Status: Operating
Mine Life: to 2022
Type of Operation: Open Pit
Summary: Huckleberry, copper/molybdenum mine, is located 88 kilometres from Houston, British Columbia, Canada. From this year on, Imperial Metals holds 100% of the mine's shares through its wholly owned subsidiary HML Mining Inc. The mine runs all year round; nonetheless, in August 2016 it closed due to care and maintenance.

6. Mount Polley
2016 Revenue: $131.5 million
Produces: Copper, gold
Proponent: Imperial Metals
Status: Operating
Mine Life: to 2025
Type of Operation: Open Pit
Summary: Mount Polley, located in south-central British Columbia, Canada, is an open pit mine which produces copper and gold. The target production for 2017 is 25-28 million pounds copper and 55-60 thousand ounces gold. Open pit operations are crucial in 2017, as it is expected that all the annual production derive from these.

7. New Afton
2016 Revenue: $287.2 million
Produces: Copper, gold
Proponent: New Gold Inc.
Status: Operating
Mine Life: 12 years (from 2012)
Type of Operation: Underground
Summary: New Afton is located northeast of Vancouver and 10 kilometers west of Kamloops, British Columbia, Canada. It is 100% owned by New Gold Inc. The reserve consists of 1.2 million ounces gold, 4.2 million ounces silver and 1.1 billion pounds copper.

8. Copper Mountain
2016 Revenue: $278 million (277,996)
Produces: copper, gold, silver
Proponent: Copper Mountain Mining
Status: Operating
Mine Life: 17 years (from 2015)
Type of Operation: Open Pit
Summary: Copper Mountain mine is located near Princeton and close to Vancouver in southern British Columbia, Canada. It has a resource of approximately 5 billion pounds of copper. The ownership of the mine is 75% Copper Mountain Mining Corp. and 25% Mitsubishi Metals Corporation.

Hon. Minister Michelle Mungall

Ministry of Energy, Mines and Petroleum Resources
BRITISH COLUMBIA

What marks British Columbia (B.C.) as a premium mining investment destination and how do you aim to keep it competitive?
We have a long history with mining, and a well-established regularity system and infrastructure, so in terms of government bureaucracy we know how to be efficient and are constantly looking for improvements. With the new NDP government, we want to ensure that the sector can continue doing well. We are working with industry, communities, First Nations and local governments to build the taskforce up so it can provide strong recommendations to government in how we can best support the industry.
Investing anywhere in Canada is going to be a good investment for the mining industry, we are a stable country with well-established relationships with the industry going back over a century in many places, and this is certainly the case in B.C - my ancestors were miners. We continue to work on ensuring that we are competitive in B.C., so as an example we are starting the Mining Jobs Taskforce working with all stakeholders, to provide good family-supporting jobs for communities throughout B.C. and look at the sustainability of jobs, which means the sustainability of industry in this province.

A concern for investors looking to British Columbia has been collaborations with First Nations, what would be your message to the investment community on this topic?
In 2017, Canada is at the beginning at an era of reconciliation with First Nations and changing how we work together for the better. Our particular government has been very clear that building meaningful partnerships with First Nations is one of our top priorities and we are going to be looking at that from industry as well. The reality is that the mining industry in B.C. has already started off on a good foot in building relations with First Nations.
We have over 200 First Nations in B.C. and I recently just met with many of them to talk about their working relations with mining companies in their region, which for the most part, are positive and long-standing working relationships and it is imperative that we continue to build these. Together, we have been working on regulatory framework not only for inter-government relationships, but also how we all work with industry. It is encouraging is that industry, First Nations communities, local, provincial and federal governments are all committed to build relations on the framework of reconciliation.

The Mount Polley disaster was a huge learning curve for the British Columbian mining industry. What is your message to mining leaders with regards to environmental impact?
I think it is important that industry recognises that their employees do not want to be drinking dirty water, breathing dirty air, and they want to be growing their food in clean soil. We have a responsibility as government and industry to ensure that we are protecting our land and water, as well as meeting our green-house gas reduction targets. We have been a leader in reducing green-house gas emissions, now the rest of the world is heading in that direction and we want to continue to lead. When mining leaders come to B.C., they can know they are part of that leadership for the rest of the world.

The previous government made investment into power infrastructure which was well received by the mining industry. What efforts will the new NDP government be making to support the growth of the B.C. mining industry?
An example that this government took on days after being sworn in, was with Teck Resources, which is one of British Columbia's top employers. Teck was selling its shares of the hydro-electric dam, and under the previous government they were struggling to get a deal with the B.C. crown corporation, BC Hydro. It was so imperative to have a strong relationship between the government and Teck for the future viability of jobs in the Kootenay region, but also because Teck is such an important employer for B.C. Our government stepped up to the plate, and we worked with Teck and got a deal so that the dam remains in the public sphere, so that portion of Waneta Dam has now been purchased by B.C. Hydro and has a deal with Teck to continue delivering power to their operations. We want Teck to be here, they have such strong roots in the Kootenays. It was a win-win situation for B.C. and Teck, and that is the way we want to be working with the industry.

At this turning point for the global mining industry and British Columbia with the new NDP government, what is your vision going forward and what would you like to achieve in the coming years?
British Columbia and Canada in relation with the rest of the world is being presented with some very exciting opportunities in terms of leading with a new look to our relationship with the environment and building reconciliation with First Nations. The new NDP government, with Premier John Horgan and myself, are very much looking forward to working with industry on forging these paths forward, building on our past strengths and coming out to build a better B.C.

Mineral Production in British Columbia

As production figures rebound, miners in BC are cautious and taking precautions against future volatility

In line with surging exploration activity, production figures for British Columbia have experienced an important uptick over the last year. The British Columbia Ministry of Energy and Mines estimates the total value of mine production for 2016 at CAD$7.1 billion, representing a 21% increase year-on-year and the province's highest annual figure since 2012. This uptick in the value of mineral production contributes to the positive turnaround in business sentiment as majors are beginning to reap the benefits of higher commodities prices. B.C.'s main commodities, coal and copper, comprised 46% and 31% respectively of the province's total mining output. Meanwhile, gold has gained ground and now represents 10% of B.C.'s mining output by value, up from 7% two years prior.
Likewise, exports of metallic mineral products from British Columbia increased by 9% during 2016, reaching CAD$4.8 billion and representing over 12% of the province's total exports. Additionally, coal exports posted strong growth of 33%, reaching CAD$4.2 billion and representing almost 11% of B.C.'s total exports, mainly driven by strong demand from Asia. In fact, roughly 60% of British Columbia's metallic minerals and coal exports were shipped to destinations across the Pacific in 2016.

A turnaround in fortunes

Overall, eight metal mines and seven coal mines are currently in production in British Columbia. Of these, one metal mine and five coal mines are operated by the Vancouver-based giant Teck Resources. Teck's Highland Valley Copper mine, the largest open-pit copper mine in Canada, has produced in excess of 120,000 mt/y of copper since 2014. The company announced in late 2016 that its wholly owned subsidiary, Teck Highland Valley Copper Partnership, had entered an exploration and material purchase agreement with junior company Nicola Mining at the latter's nearby Thule Copper property. In the coal-rich southeastern British Columbia Teck operates the Coal Mountain, Elkview, Fording River, Greenhills and Lines Creek coal mines.
Substantial coal potential also lies in northeast British Columbia, a region that boasts competitive infrastructure vital for coal producing areas, such as major railway links. In line with industry trends, asset consolidation in the region is expected, with majors looking to increase supply as markets continue to pick up.
Teck has greatly benefitted from a marked surge in the price of steelmaking coal during 2016, which rose from below $80/mt to above $300/mt in November last

"We have a steady stream of work from our main clients, and we have seen great opportunities to advance projects in this type of economic environment. There is funding available for the right kind of projects, and the right kind of projects will return investment.

- Simon Cmrlec, president North America, Ausenco."

> "We have no debt on our balance sheet and we are currently fully financed up to the point of making a construction decision on Kemess Underground...We expect to continue exploring Kemess East in the future, as the deposit remains open in several directions."
>
> - John Miniotis,
> VP corporate development,
> AuRico Metals

year. Since then, however, prices have dropped and have fluctuated between $150 and $200 during 2017. Teck was the best performing stock in the Toronto Stock Exchange in 2016 and the company announced that the annual profit attributable to shareholders for 2016 had reached $1.1 billion, up from $188 million in 2015.

Teck has not been the only company benefitting from a major shift in fortunes over the past year. At Copper Mountain Mining Corporation average production of 41,200 mt/day was achieved during the last quarter of 2016, while its benchmark capacity was 35,000 mt/day. Moreover, the company was cash flow positive during the past year and was able to pay $35 million towards debt. The company implemented several technological changes in the utilization of trucks and modified its pit design to utilize short hauls to increase productivity. These developments led to the reduction of operational costs to $1.25 per mt. Moreover, Copper Mountain also has noteworthy exploration potential at its site, having replaced everything it has mined in reserves already. Speaking about the company's production deal with Mitsubishi Metals and the advantages of operating in Canada given the current exchange rate versus the U.S. dollar, Jim O'Rourke, director and CEO at Copper Mountain, noted: "We have a very good relationship with Mitsubishi. Our life of mine concentrate is shipped to their smelters and, through our agreement, we are paid LME prices and get benchmark TC/RC rates… We went out of our way to make sure that we were buying as much as we could with Canadian dollars and this worked out really well. Roughly 80% of our cost base is in Canadian dollars, including wages and power."

Additional operating metal mines in British Columbia include Centerra Gold's Mount Milligan, Taseko's Gibraltar mine, New Gold's New Acton and Imperial Metals' Red Chris, Huckleberry and Mount Polley mines. Aside from Teck, Conuma Coal and Hillsborough Resources also operate coal mines in the province.

Over the coming year, selected mines are projected to come out of care and maintenance as commodity prices increase and their gains appear more sustainable. It is important to note that the B.C. government, together with the Mining Association of British Columbia, scaled up efforts during the mining downturn to prevent more mines going into care and maintenance by enacting a five-year deferral program for power costs at mine sites, an extremely welcome development for the industry and communities heavily reliant on mining activity throughout the province.

Moreover, the financing community has started to highlight the companies' willingness to gradually increase production following a tumultuous period, as Jason Neal, global co-head of mining and metals group at BMO Capital Markets notes:

Image courtesy of Skeena

"Thus far in 2017, companies are focusing less on balance sheets and more on income statements and growing their businesses… we also anticipate more IPOs over the next two years."

With production figures rebounding strongly in 2016, companies envisage to sustain growth this year. Nonetheless, persisting volatility in the markets could derail British Columbia's production recovery. In this regard, it will be important for mining companies to implement the right mechanisms to shield their operations against future price shocks, some of which are already evident at sites across the province.

> "Injection hoisting is an innovative concept that we were working on...We were co winners of the big #DisruptMining prize and won the people's choice award, meaning that the audience was impressed by this technology. Now, we are looking at a site where we can develop a full-scale prototype."
>
> - Roy Slack,
> president,
> Cementation Canada.

Jim O'Rourke

Director and CEO
COPPER MOUNTAIN MINING CORPORATION

> "We have implemented several technological changes such as a dispatch system for the mine that has been very successful as it allowed us to increase our truck capacity...We were able to look at the pit design and utilize short hauls, which increased the productivity of our trucks without any added cost."

What was Copper Mountain's strategy to fare the period of low copper prices and what strategy is in place following your very positive results in 2016?

At the end, it is all about people and we have an excellent crew. For the third consecutive year, we won the award for the safest mid-size mine in British Columbia. This speaks well of our employees and how they work together. There is no question that with the drop in the copper price in 2015, things were difficult and looking bleak, but it is amazing how everyone came together: the province, shareholders and suppliers. We were able to make some big cuts in our cost structure. With B.C. Hydro, the industry negotiated a power payment deferral plan. As part of this scheme, we got up to a 75% deferral on our power costs of roughly $30 million. Everyone wanted to keep operations running and we did not want layoffs. We are a non-union operation and as a result, the site is like a big family. In 2016, we set new records with regard to our mine production and mill production. A big part of that was our secondary crusher, which was key. During the last quarter of 2016, our operations averaged 41,200 ton a day, while our benchmark capacity was 35,000 t/d. There were many things that had to come together and the rise of copper prices in the latter part of the year was very beneficial. We ended up the year being cash flow positive and we paid $35 million toward debt during the year. In summary, 2016 was a very good year for us.

What specific measures have you taken toward cost optimization?

We have implemented several technological changes such as a dispatch system for the mine that has been very successful as it allowed us to increase our truck capacity. Our maintenance has improved with it, as has the utilization of trucks. With the dispatch system, you have a record of every moment when the trucks stop or need fuel. We also have GPS technology and pressure gauges in the tires that are transmitted back to the dispatch system. Most importantly, we were able to look at the pit design and utilize short hauls, which increased the productivity of our trucks without any added cost. Our cost is now $1.25 per Mt, which is as high as you get in operations worldwide.

How would you describe the exploration potential in the property and what is your program for this year?

The interesting part is the west end of pit two. Last year we had a very small program, we drilled about 5,000 meters and added about 10 million tons. This year we are planning to drill 10,000 meters in the same area. It is quite advantageous to grow the pit in that direction. With our exploration program, we have replaced everything we have mined and we still have excellent exploration potential.

How has the deal with Mitsubishi Metals been favorable for both parties?

We have a very good relationship with Mitsubishi. Our life of mine concentrate is shipped to their smelters and, through our agreement, we are paid LME prices and get benchmark TC/RC rates. Moreover, we train people at the mine, we have a metallurgist and mine engineers, which is beneficial for both of us.

How has the Canadian exchange rate worked to your advantage?

We adjusted this at the start of 2016. We went out of our way to make sure that we were buying as much as we could with Canadian dollars and this worked out really well. Roughly 80% of our cost base is in Canadian dollars, including wages and power. However, we get our diesel from Washington state, as we were able to secure our required supply of 30 million liters per year by 5 cents less than in Canada.

What are your perspectives for the copper market?

I think that with China consuming 50 per cent of the world's copper, a lot is going to depend on the China market, and to an extent the U.S. The deterioration of grades in Chile and Peru should bode well for a company like us, since we have a very clean concentrate that can be blended. With the downturn in the copper price over the last couple of years, there has not been much effort to get new mines and, as a consequence, we could see a very big swing in prices upwards. To some extent I think there is a shortage of concentrate.

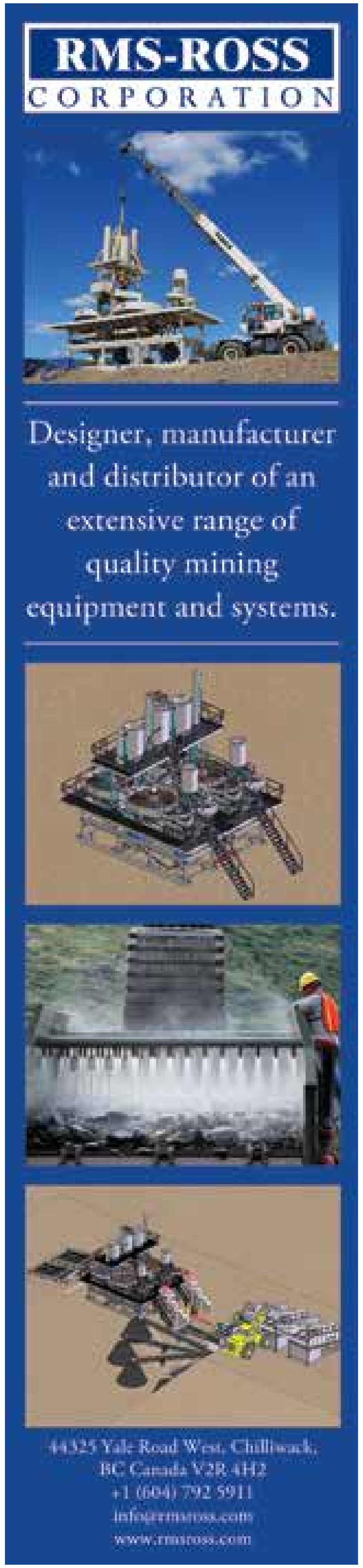
Navigating the Regulatory Framework

Balancing Regulations, Safeguards and Incentives

British Columbia hosts some of the most eye-catching mining projects in North America, thereby contributing to the renewed buzz in the sector. The first is Pretivm's Brucejack, a high-grade (16 g/mt gold) underground mine, with proven and probable mineral reserves at its Valley of Kings deposit of 8.1 million oz. gold and an estimated mine life of over 18 years. Pretivm's success in developing the Brucejack mine has encouraged companies looking to advance B.C.'s next breakthrough project and the mine is expected and poured first gold in June 2017.

Another widely followed success story comes from Seabridge Gold, whose KSM project is the world's largest undeveloped gold project, based on mineral reserves. The latest inferred resource estimates at its Deep Kerr deposit total 19 million oz. gold and 1.92 billion mt copper grading 0.4%. Capital costs for KSM are expected at US$5.5 billion and the project has an expected mine life of 51 years. KSM has received approval from provincial and federal authorities and is only the second metal mine to do so in the past five years in B.C.

Like Seabridge, IDM Mining is currently developing its flagship Red Mountain project in the Golden Triangle. The company has capitalized on existing infrastructure and work performed in the property and is eyeing a 1,000 mt/d operation with production of 80,000 oz/y gold. Red Mountain's proximity to the town of Stewart makes transportation and operational costs more competitive, adding to the already economic viability of the project. Additionally, the company has enjoyed constructive relations with the local Nisga'a First Nation thereby facilitating the development process. IDM is expected to announce a construction decision in the last quarter of 2017 at the earliest. Reflecting on the company's developments in 2016, Robert McLeod, president and CEO at IDM, declared: "2016 was a transformative year for the company. We raised US$20 million… Raising money



Jeff Hanman

Vice President, Corporate Affairs
TECK RESOURCES

> "In terms of future growth demand, Asia, and specifically China, continues to be the major driver of demand for our industry."

With steelmaking coal prices surging over the past year, has Teck outlined plans to add capacity at its British Columbia sites?
With respect to steelmaking coal, our focus remains on operating excellence and controlling costs to take advantage of the current positive price environment. We have announced 2017 steelmaking coal production guidance of 27 to 27.5 million tonnes

As Canada's largest diversified mining company, what will be Teck's main focus areas over the coming years?
In terms of Teck's focus over the coming years, we have a strong internal pipeline of long-term growth projects in stable jurisdictions that we see driving the future growth of our company.
This includes the Fort Hills oil sands project, in which Teck is a 20% partner. First oil from Fort Hills is anticipated by the end of 2017. We are also advancing our Quebrada Blanca Phase 2 copper project in northern Chile, which is currently moving through the regulatory review process and we could be in a position to make a decision by mid-2018. Nueva Unión, which is currently in the pre-feasibility stage, is one of Latin America's most significant undeveloped copper-gold-molybdenum projects. This innovative partnership between Teck and Goldcorp combines two stand-alone projects, resulting in one project with a longer mine life at a lower cost and improved capital efficiency.

70% of Teck's exports are destined to Asian markets. Where do you expect growth in demand for the next years?
In terms of future growth demand, Asia, and specifically China, continues to be the major driver of demand for our industry. It is anticipated that China will grow by around 6.5% this year, which is larger than the annual GDP of Switzerland. Sustaining that level of growth will require more of the products we produce. In addition, India is now leading demand growth for steelmaking coal, as their focus continues to be on urbanization and infrastructure that supports increased demand for steel.

Teck achieved an impressive turnaround in the marking during 2016. What makes Teck's stocks a safe bet for investors?
Looking ahead, Teck is in a strong position financially. We have a portfolio of long-life operations, well positioned on the global industry cost curves to perform well throughout the market cycles, and we are advancing a number of world-class, long-term growth projects. Reflecting that view, we have recently doubled the dividend with the possibility of higher dividends at year end, depending on market conditions and company performance.

for this project has not been easy because of the conditions of the markets but there is significant interest from our shareholders, particularly as these projects in Canada are rare. There is tremendous exploration potential as well, which we will continue to perform."
During the first quarter of 2017, Toronto-based AuRico Metals received environmental approval from the Canadian Environmental Assessment Agency (CEAA) and the British Columbia Environmental Assessment Office (EAO) for its wholly-owned Kemess Underground project. Following this development, AuRico is looking forward to an eventful year, when a financing and construction decisions are expected. The company has a strong balance sheet due to a strong portfolio of royalties and no debt. Speaking about the strengths of the project, John Miniotis, VP of corporate development at Aurico elaborates: "The Kemess underground project had been discovered prior to the formation of AuRico Metals and is located only 6 km away from significant infrastructure at Kemess South, which we estimate has a current replacement value of approximately $1 billion, providing the project with a huge advantage. We are happy to be active in British Columbia, which is known for its bulk tonnage copper-gold porphyry deposits and at Kemess we have over 12 million gold equivalent ounces in all categories
With a handful of mines expected to emerge from care and maintenance, Nicola Mining is a company well placed to profit from these developments as it possesses a newly built mill among its assets, as well as mine and milling permits. Together, these have the potential of serving as a consolidator for small gold and silver mine projects elsewhere in the province, as an amendment to the mill permit al-

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> "We are in partnership with Samsung, we sell them 100% of our concentrates in Mexico. They want their raw materials for electronics and construction sourced because they have ethical funds. They hired SRK Engineering, toured the property and ultimately put the seal of approval for the project."
>
> - David Wolfin,
> president and CEO,
> Avino Silver and Gold Mines

Robert McLeod

President, CEO & Director
IDM MINING

"B.C. is probably just one of the best jurisdictions in terms of regulations. In the case of Red Mountain there are no environmental sensitivities as there are no fisheries or salmon habitats and there are very low environmental risks."

Can you provide a brief history and overview of IDM's Red Mountain project?
We acquired the property in 2014, which was the bottom of the bear market. We capitalized on the extensive previous work that had been done and we identified that we had an economically viable project. There has never been any production in Red Mountain but you can move 2,500 tons per day, as there is some infrastructure in place. This has really helped our project's economics. The two best things about the ore body are that it is high grade, it averages 8 and 10 grams per ton, and that it is wide and amenable to bulk underground mining, averaging from 16 to 40 meters wide. We knew this was going to be a very low cost producer. Capital costs are of about $85 million and we expect our feasibility in or around that range, which is affordable for a junior company such as IDM. We are looking at a 1,000-ton per day operation and the project should produce 80,000 oz. per year.

When is IDM expected to announce construction?
Probably in Q4 of 2017 or Q1 of 2018, at the earliest. We are going to go into construction ourselves. For this, we have a tremendous team. On the engineering side we are working with JDS Mining and Energy, a boutique-engineering firm that has worked on noteworthy projects. In terms of financing, since it is an affordable project with a quick payback, it would probably stand a pretty decent debt facility.

How would you describe IDM's market performance and capital raising efforts?
2016 was a transformative year for the company. We raised 20 million dollars. We have three significant corporate shareholders: Kinross, Osisko Mining and Premium Gold and we are 55 percent institutionally held by top funds out of Toronto, New York and Europe. Raising money for this project has not been easy because of the conditions of the markets but there is significant interest from our shareholders, particularly as these projects in Canada are rare. There is a tremendous exploration potential as well, which we will continue to perform.

How would you describe the permitting process in British Columbia?
British Columbia is one of the most transparent, fair and rigorous jurisdictions in the world. The stages of the application process are clearly delineated. When we file our application, the maximum time that the regulators can take to give a decision is 180 days. This is a great advantage in comparison to other jurisdictions. The Mount Polley incident has resulted in a tremendous amount of emphasis into proper tailings design and water management at the provincial and federal level. Teams now set goals that are peer reviewed multiple times with emphasis on BAT or best available technology. It is a very rigorous process. We had to undertake an extensive amount of baseline work to make as robust tailings facility as possible. In my opinion B.C. is probably just one of the best jurisdictions in terms of regulations. In the case of Red Mountain there are no environmental sensitivities as there are no fisheries or salmon habitats and there are very low environmental risks.

What could the B.C. government do to foster investment?
On the exploration side, the great Canadian advantage is the flow-through tax credit. However, Manitoba and Quebec have a more competitive flow-through scheme than B.C. This makes a big difference in terms of investments going to the ground. If the government could help with the financing of infrastructure to access ore projects, it would make many more projects feasible, as they sometimes require billions of dollars in development capital. Other than that, I do not think there is much missing in B.C.

Can you provide some closing remarks for our readership in regards to the Red Mountain Project?
Red Mountain is a low cost, low capex, high-grade underground bulk mineable project in a favorable jurisdiction, coupled with tremendous exploration upside. We think 2017 is going to be an even more transformative year for IDM. Projects like Red Mountain are extremely rare to find, anywhere in the world.

David Wolfin

President & CEO
AVINO SILVER AND GOLD MINES

Can you provide an overview on Avino and the company's operations in British Columbia?
Avino has been around since 1968, it is a family company founded by my father. He was a mining stockbroker and liked to acquire properties near operating mines. In B.C., we finalized the acquisition of the Bralorne mine in 2014. We are very familiar with our assets, since we have acquired properties in that district for a very long time. Bralorne is made up of three mines, which collectively produced over 4 million oz. of gold from the Great Depression years to the late 60s. Other companies have tried to reopen the mine but have not been successful. We have been working on the environmental process but since the Mount Polley disaster, this has taken longer than initially expected. We have raised and fortified our tailings dam, we have installed a microfiltration water treatment plant and we are hoping to reopen the mine later this year.

What are Avino's plans for Bralorne and the adjacent properties?
We have other properties in that area, as there were all kinds of little mines. We think there is still opportunity to find mill feed that would be processed at the centralized mill in Bralorne. Once we get more cash flow, we will perform more exploration work. We did some drilling after the amalgamation of the mine in 2014. We just issued a new resource assessment last year, which grew. We feel that because of the geological settings of the mines, new discoveries will continue at depth. Of course, there are risks, but we are mitigating them by spreading out costs, which is an approach we took in Mexico which worked successfully. We are working to upgrade, expand and modernize the mill at Bralorne by moving the crushing circuit to a separate building which will free up space in the main mill building enabling us to install larger capacity ball mills and more flotation cells.

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lows the company to receive material from any point in B.C. Peter Espig, CEO at Nicola Mining declared: "We are the only milling facility in British Columbia that owns its land freehold. Aside from owning the approximate 900 acres of industrial zoned land, permitting was expedited because the entire site is brownfield. These factors were instrumental in expediting the amendment to our M-68 mine permit. Environmental impact studies can cost millions of dollars and they often dissuade investors because there is no guarantee of getting a permit. Indeed, since then we have been able to secure multiple milling and mining partnerships with high-grade properties."
A similar approach has been adopted by Avino Silver and Gold Mines, a company with over four decades of experience in British Columbia. Avino holds the Bralorne property in southwestern B.C., where it has raised and fortified the existing tailings dam and installed a microfiltration water treatment plant as part of the environmental assessment process. The company has further properties in the region with the aim to consolidate assets. "We have other properties in that area as there were all kinds of little mines. We think there is still opportunity to find mill feed that would be processed at the centralized mill in Bralorne…Of course, there are risks but we are mitigating them by spreading out costs, which is an approach we took in Mexico and worked successfully," declared David Wolfin, president and CEO at Avino.
With outstanding natural beauty and a long tradition of environmental activism, British Columbia has placed special emphasis on environmental regulations, particularly after the 2014 Mount Polley tailings dam disaster. In this regard, environmental ser-

Image courtesy of Strongbow

vices providers are helping clients in the sector to mitigate risks from every stage of the mining life cycle but particularly during the planning and development phase, helping them understand and comply with stricter government regulations. "The Mount Polley breach certainly put a spotlight on dams and the potential impacts of dam failures… In British Columbia, the government has made risk analyses of dams a top priority and expects the engineering and operations aspects of tailings facilities to be well understood… The government wants to understand the risks associated with dams in earlier stages of a project than they did ten years ago," explained Marc Wen, senior partner at Environmental Resources Management (ERM).

Production results in 2016, coupled with the industry's newly found optimism for development and construction, should bode well for a return of capital influx to British Columbia, as Simon Cmrlec, president of North America at Ausenco, stated: "Ausenco has seen an increase in activity in mining recently, particularly involving early-stage gold and base metal projects. We have a steady stream of work from our main clients and we have seen great opportunities to advance projects in this type of economic environment. There is funding available for the right kind of projects and the right kind of projects will return investment."

> "The downturn also brought about a lot of budget cutting. Over the past year, I have seen more IT budgets getting approved, which indicates mining companies are more bullish about the market this year. Mining companies are spending money on analytics, visibility, ERPs, and system consolidation."
>
> - Sean Bredin, national mining leader, BDO Canada

Innovation, Optimization and Automation

Responsible and smarter mining

The Canadian mining industry has for decades been at the forefront of innovation and technological developments. This has proved a major advantage during the recent period of low commodity prices, with Canadian operators cutting down costs through increases in productivity and the adoption of new technologies that make their operations more efficient. Commodity prices aside, innovation will be key for companies that want to remain competitive in the long run. Fortunately, leading companies servicing clients in British Columbia, Yukon, and internationally are taking the necessary measures to help clients optimize processes and profit from new technologies.

Situated inside the University of British Columbia's main campus in Vancouver, Motion Metrics has, for over 15 years, delivered innovative solutions to the mining industry. The company is currently focused on artificial intelligence (AI) with a Deep Learning team dedicated to that effort. It currently operates AI via tooth detection systems on loaders and excavators and the company plans to replicate this technology for autonomous cars in mining operations. Moreover, Motion Metrics is developing AI solutions to make the rock fragmentation process (comminution) more efficient: "We are using stereo imaging, which gives us a 3D measurement of the rock and,

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Shahram Tafazoli

President and CEO
MOTION METRICS

"Currently, our missing tooth detection systems for loaders and excavators already operate using artificial intelligence. We are also bringing artificial intelligence to the rock fragmentation process. Two to four percent of total global electricity consumption is attributed to comminution, and our goal is to streamline this process and make it more energy-efficient."

What have been Motion Metrics' major developments over the past few years?

Recently, Motion Metrics pivoted towards a focus on artificial intelligence, and we now have a Deep Learning team dedicated to that effort. The purpose of artificial intelligence is to replicate human reasoning, but much faster. We are now in the data labeling phase in which we assign data points to different parts of an excavator's shovel, for example. We ultimately want to replicate the technology behind autonomous cars in the mining industry. Currently, our missing tooth detection systems for loaders and excavators already operate using artificial intelligence. We are also bringing artificial intelligence to the rock fragmentation process. Two to four percent of total global electricity consumption is attributed to comminution, and our goal is to streamline this process and make it more energy-efficient. To accomplish this, we are using stereo imaging, which gives us a 3D measurement of the rock and, therefore, a more accurate reading. From there, all the data is uploaded into a cloud server, which makes it easier to examine the rocks and then scale blasting efforts up or down. We also provide expert opinion and analysis as a service. Comminution is five times more expensive at each stage of the fragmentation process, and our experts make sure the comminution is optimal before moving onto the next stage. Eventually, our crushers and conveyor belts will be able to read the rocks and send this data to the cloud. We are also aggressively moving in the direction of autonomous mining, and we aspire to be a key player in this space in the next few years.

What is your strategy to reach out to smaller mining companies?

Motion Metrics' main focus has traditionally been on larger companies because that segment of the market is more lucrative. However, we eventually want all mines to be able to access our technology so we have developed a handheld fragmentation analysis device that has nearly doubled our customer base because it is a much simpler, more affordable product. We have also begun selling our system as a service, as opposed to just the device, on a subscription basis. Half of our staff is allocated toward research and development, with a particular focus on product development and expanding our market. Despite the mining downturn, 2016 was the best year in our company's history in terms of revenue. We attribute this to a wider diversity of products and increased accessibility to our services. We see a significant opportunity across the market to optimize the fragmentation process. In my opinion, comminution is far from optimized, and our technology is applicable across the world.

How will you ensure your technology does not reduce the number of mining jobs?

Our ultimate goal is not to eliminate jobs, but rather to enhance the quality of the more menial jobs and ultimately make those employees safer. Safety is a major issue in mining, particularly in less developed countries. Autonomous and semi-autonomous mining operations mitigate much of the inherent safety risk. I believe there is a step between human intelligence and artificial intelligence, which is human-assisted artificial intelligence. This is where the menial, unsafe jobs will be reallocated. There is also a lot of pressure from investors for companies to increase their safety measures and keep their risk lower. For instance, we are already seeing autonomous trucks and drills in the mining industry.

Have you felt the effects of the uptick in the mining market?

We are well-known for being a non-mining industry company developing mining technology, and have a loyal base of customers. The uptick has been apparent, but Motion Metrics performed well throughout the downturn regardless. We like to keep a mix of employees from both mining and non-mining backgrounds because we want to be exposed to a number of different perspectives and keep in touch with the latest advances in the broader tech industry. Now, however, we are at a stage where we need more mining experts to train our artificial intelligence. In the mining market, we have recently noticed more openness to new technology and more of a need for mining companies to improve their efficiencies. Good ore is getting increasingly difficult to access, and technology is needed to do this. Certain technology companies likely did not feel the same effects as other types of service companies during the downturn, as mining companies used that time to focus on innovation and increasing efficiency.

Image courtesy of Skeena

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therefore, a more accurate reading. From there, all the data is uploaded into a cloud server, which makes it easier to examine the rocks and then scale blasting efforts up or down," explained Shahram Tafazoli, president and CEO at Motion Metrics.

Although Motion Metrics has typically served larger companies in the industry, Tafazoli declared that diversification of their client portfolio is a priority: "We eventually want all mines to access our technology, therefore, we have developed a handheld fragmentation analysis device that has nearly doubled our customer base because it is a much simpler, more affordable product. We have also begun selling our system as a service on a subscription basis."

Besides innovations on modularity and commonality of parts to improve technical service and support, equipment provider RMS-Ross has focused on providing tailored-made recovery systems. "It is important to ensure that our customer's expectations are in line with ours, so the

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"Gekko's background is strongest in gold and silver, and our plants are typically in demand at sites that are remote or difficult to access. The modular nature of our plants makes them nimble and easy to construct."

- Greg Rasmussen, vice president of sales and operations, Gekko Systems

Scott Plummer

President
RMS-ROSS CORPORATION

“Now, we are building several complete mining circuits for British Columbia, which are some of the most exciting projects we have ever seen. Most of the instances began as gold projects, but through advanced laboratory testing and separation work, we were able to identify whole new streams of profit centers that would have otherwise gone to tailings ponds.”

How did RMS-Ross adapt to the global mining downturn?

RMS-Ross decreased manufacturing employment, but we kept all of our engineers. Typically, engineers are very busy supplying the manufacturing team with drawings and modifications. With a decrease in orders, however, the engineers had time to completely redesign and revamp our product lines. We fully used any spare time to consult with our customers who had been using our products over different periods of time. We determined any issues at all that they had in their applications, as well as modifications that would improve our products and their ease of use of these systems. The engineers then took this feedback and created entirely new updated designs.

As a result, we were able to make our products more modular, which increased the ease of assembly. Modularity implies ease of manufacturing, as well as shipping, and assembly, which makes things easier for both the customer and the manufacturers. We focused on creating a commonality of parts to greatly reduce the overall number of parts required for different products. This simplifies the assembly and reduces the number of spares required.

Where have you seen the biggest pickup in projects over the past year?

The largest increase of RMS-Ross’ new project complete recovery system sales have come from Canada, which is different for us. We have projects all over the world, in over 60 countries, but before last year, it had been awhile since we had many in Canada, and especially in British Columbia, apart from selling certain components. Now, we are building several complete mining circuits for British Columbia, which are some of the most exciting projects we have ever seen. Most of the instances began as gold projects, but through advanced laboratory testing and separation work, we were able to identify whole new streams of profit centers that would have otherwise gone to tailings ponds. In several cases, almost all of the heavy mineral concentrates can be separated through a series of advanced separation approaches, to be as many as 7 or 8 different high grade pay products.

How does RMS-Ross compete with large, international companies that now operate and sell in North America and abroad?

There has recently been huge promotion and advertising by Chinese manufacturers, which profit from much cheaper labor costs. Our products are generally more expensive than Chinese products, but they are also generally much higher-quality. Customers all over the world understand that Canadian equipment companies make high-quality products that are superior in design and also are built more robust to last longer, and are as a result, much more cost-effective in the long-run. The fact that our products are long-lasting also makes it easier on our services team and saves our customers on operational costs.

Which innovation trends have you noticed in the mining equipment industry?

In addition to modularity, commonality of parts, and increased robustness, a popular trend in the industry is preemptive problem solving for customers. For example, we sometimes receive high quality laboratory test results that have been carried out by a customer, but that have not been thought through in a process methodology and therefore do not provide us with any of the information required to design an optimal recovery system. We want to be able to recommend a body of test work that gives us clear insights and knowledge and allows us to scale logically from lab work and pilot test work to full scale operation. It is great to have an elemental analysis, but we need to know particle size breakdowns, where certain values lie, and how to separate certain elements. We need to know that our equipment is going to work in a customer’s application before selling it to them. It is important to ensure that our customer’s expectations are in line with ours, so the equipment that we provide is used in the best manner and that the recovery system is designed around properly conceived mineralogical test work. The main goal is to help customers advance with their projects in the most efficient, effective manner possible for their success.

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equipment that we provide is used in the best manner and that the recovery system is designed around properly conceived mineralogical test work. The main goal is to help customers advance their projects in the most efficient and effective manner possible for their success,” stated Scott Plummer, president at RMS-Ross.

While technology remains one of the main driving factors in optimization at production sites, companies are looking at innovative, yet simple ways to enhance optimization. Montreal-based BBA has focused on presenting its clients the best strategy to make the most of existing resources and infrastructure. “In our front end studies mining division, we ensure that we optimize the operating costs of the project as those are often more important to the overall project economics than the initial capital. We usually review the project’s highlight opportunities that would help us to compress the footprint of the project and enhance overall optimization…for example, we have helped clients reduce energy costs by performing ore sorting and separation as early in the process as possible, as crushing and grinding are very energy-intensive…our team is often called to help our industrial clients across Canada to implement innovative control strategies to reduce costs or improve quality of recovery,” declared Colin Hardie, director of mining and process studies, Mining and Metals, at BBA.

On the exploration front, survey and geophysics companies have noted behavioral changes from their clients as they become more risk-averse amid volatile market conditions. “Before, our clients from the mining sector used to purchase our services before they started mine planning and the feasibility study phase, but now they are asking for our services before they put a foot on the ground,” stated James Hume, president at Eagle Mapping, a survey company specialized in Lidar technology.

At a time when capital raising remains a difficult task, companies want to limit their risk before embarking on a drilling program. Skytem, a survey company, aims to help clients reduce this risk: “Realistically, our confidence level for targeted drilling from data modeling averages about 60 to

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Andrew Haynes

VP Mining North America
GOLDER ASSOCIATES

Can you provide an overview of Golder’s current operations in B.C.?

AH: We have a broad range of projects, including those in operating, expansion, and planning stages in British Columbia, the Northwest Territories and Yukon. We serve these projects from several offices, and our Vancouver office also serves the global market, given Vancouver’s importance for the mining industry. We are running projects across the globe from Vancouver in collaboration with our colleagues in Latin America, Australasia, Europe and Africa.

How does Golder benefit from its global presence in terms of sharing knowledge and expertise?

AH: We have had this advantage for a long time. In some ways, I think we haven’t historically fully leveraged it for the mining industry. At the start of 2016 we reorganized our business such that we now have a mining unit as a global operating component of the company, in order to serve our mining clients better. Our clients operate globally, so it is natural for us to do the same. This has improved the way we share resources, expertise and knowledge to bring the right people regardless of the geography for any project.

How has the industry responded to the Mount Polley disaster?

AH: We have certainly seen the impacts on the industry post-Mount Polley. We have played a key role in the remedial works at Mount Polley, and helping the mine recommence normal operations. Additionally, we are working with our other clients, looking at their tailings facilities, reducing risks, and improving the performance of their facilities. In B.C., the industry has developed a stronger appreciation that successful tailings facilities require a combination of good design, good operating practices, strong stewardship, and ongoing interaction between the designer and user. It is a process that evolves progressively and cooperation is needed.

How has Golder integrated the environmental component into your projects?

AH: This is not a new thing for us; we have been on this path for a decade and believe we are one of the few consultants that are effective at truly integrating environment and engineering. Our approach is such that we start with the desired environment outcomes and this drives the engineering. We have been successful in a number of projects that integrate these components and our clients benefit from this process. When you get the design right from the beginning, integrating the right components, it accelerates the permitting process and costs go down.

Moreover, every step of the design needs to be focused on what the closure and post-closure outcome will be. There is zero tolerance for short-term resource exploitation leaving long-term liabilities for tax payers.

Image courtesy of Copper Mountain

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70% of being able to select drillable targets. Having two separate dipole moments allows for very high resolution mapping from surface to depth. Additionally, the preliminary data inversions we collect are returned to our clients within 48 hours of flying. This is particularly important in remote locations as it allows companies to make quick decisions about whether or not to expand the survey over areas of interest before the aircraft and field crew leave the survey area." explained Gary Tipper, regional sales manager at Skytem.

Similarly, Quantec Geoscience, a company specialized in developing DC resistivity IP chargeability (DCIP), and magnetotelluric (MT) systems, noted that companies want to extract as much data and information as possible before taking their projects forward: "Clients ranging from major mining companies to small junior miners have embraced the innovative survey systems for DCIP and MT acquisition. As a result, the systems have been deployed for exploration programs all over the world and the demand for these types of survey has continued to grow," declared Robert Hearst, chief geophysicist at Quantec.

Developments on big data and AI obey the needs of clients for real-time data access in order to make the necessary decisions at mining sites, regardless of the stage along the mining value chain. Therefore, we expect important innovations on this front for years to come, particularly in British Columbia, which for decades has developed a reputation of a mining innovation hub. Important clusters for the industry have been developed in greater Vancouver, from environmental services to artificial intelligence applications, the city will stand as a major mining innovation hub for the foreseeable future, ready to export its technologies to the world.

First Nations

A future of cooperation

Together, British Columbia and Yukon are home to 212 First Nations, jointly concentrating the greatest diversity of aboriginal cultures in Canada and representing roughly one-third of all First Nations in the country. This great diversity and heritage are source of regional pride and showcase the cultural richness of these jurisdictions.

Given the region's long history of mining, relations between First Nations and the industry date a long way back with highs and lows over time. In British Columbia, tensions between the mining sector and First Nations have been particularly scrutinized, often disregarding the progress in negotiations over time and the changing approach of companies toward First Nations groups. Efforts to ameliorate relationships have involved provincial and federal governments, namely the B.C. Treaty Process, with roughly 70% of First Nations engaged.

The governments of Canada and Yukon have settled 11 agreements, three of which are outstanding, with First Nations. Land claims in this territory provide First Nations with access, rights and obligations to land and resources, providing more certainty regarding land management and resource development. Although sources of tension with the mining industry have arisen in the past, disputes are rare, thereby facilitating the entry of companies to this territory.

Mining companies recognize the importance of engaging with First Nations and local communities and understand that cooperation is beneficial for everyone involved. In certain areas of British Columbia and Yukon, labor shortages can cause delays in taking projects forward, and therefore fostering trained and skilled labor becomes of utmost importance. Speaking about this, David Wolfin, president and CEO at Avino Silver and Gold Mines, said: "To address the labor shortage, over the last two years, we have focused our attention on education and training. In conjunction with North Island College, Sandvik, and with funding coming from the provincial and federal government, we have successfully held two underground mining training cohorts for members of the local First Nations Communities. Thus far we have had 22 graduates complete the program, and we have begun hiring them at the mine."

Avino is looking to restart operations at its Bralorne mine and is currently working with Thompson Rivers University, North Island College, the Center for Training Excellence in Mining and other mining companies to develop a B.C.-wide accepted curriculum on underground mining.

Contractors and service companies have also placed special emphasis on hiring locals wherever they operate. An example of this is Atlas Drilling, a Kamloops-based company that has worked in major projects throughout British Columbia. "Particularly in remote areas, Atlas tries to hire locally and hold local onsite training sessions. When we began working at the Red Chris mine, we held training sessions with Imperial Metals for the local First Nation… At the time, we had half of our crew from First Nations employees from this program working for us," declared Jamie Lyons, owner at Atlas Drilling.

With mining companies becoming increasingly aware of the importance of engagement with First Nations from the early stages of a project, EPCMs and consulting companies rank First Nations relations as one of their main competitive advantages. "Triton has worked cooperatively for over 25 years with First Nations throughout B.C. and the Yukon territory. This has led to formalized business partnerships with a number of First Nations communities, and these relationships are mutually beneficial… Mining companies are becoming more sensitive toward First Nations land claims and traditional territories, and it benefits them to engage members of the local communities in both the assessment and permitting phases as well as the construction and operational phases," declared

> "I support comprehensive agreements that involve the provincial and federal governments as well as First Nations governments. These parties need to get together to agree on all aspects of each different case. Examples that these negotiations can be successful include the Squamish Woodfibre LNG proposal."
>
> - Dave Porter, CEO, First Nations Energy and Mining Council of British Columbia

John Rithaler, senior environmental scientist at Triton Environmental Consultants.

In recent years, there have been encouraging developments showcasing the fruition of negotiations between governments at every level, the industry, and First Nations, serving as a reminder that involvement of every stakeholder and party is of paramount importance when taking a project forward: "I support comprehensive agreements that involve the provincial and federal governments as well as First Nations governments. These parties need to get together to agree on all aspects of each different case. Examples that these negotiations can be successful include the Squamish Woodfibre LNG proposal," stated Dave Porter, CEO of the First Nations Energy and Mining Council of British Columbia.

In fact, companies are so mindful of First Nations relations that majors increasingly consider previous engagement with them as a determining factor before acquiring a stake or full ownership of a given project. A noteworthy example of this is Goldcorp and its Coffee Gold project: "The reserves and prospectivity [of the Coffee Gold project] were very attractive, but more importantly, the management of Kaminak had done a great job in terms of reaching out to the communities and the authorities, building relationships and addressing any concerns about the project from the beginning… Goldcorp already has 22 agreements with First Nations around the country, which has helped build the long-term partnerships to operate our projects," declared Brent Bergeron, executive vice president of corporate affairs and sustainability at Goldcorp.

Although the synergy between the industry, government and First Nations shows increased dynamism, negotiation processes can still be improved. Robin Junger, national co-chair, Aboriginal and Environmental Law Groups at Mc Millan LLP explains: "We at times see a considerable degree of inconsistency in how the government implements its legal duties to First Nations. Since the ability to negotiate successful deals with First Nations is directly correlated to the government's position on permitting, we believe it is essential for the government to have a solid decision making process and to stay out of the private negotiation altogether."

Governments have successfully completed major infrastructure projects in the busy Golden Triangle area, largely through cooperation with First Nations. These projects will ultimately bring about the economic opportunities that local communities need. In Yukon, similar infrastructure developments will be required to take projects forward. For these, First Nations cooperation will be imperative, but encouraging precedents indicate these will materialize in the coming years.

Security of investments, legal certainty and stability are B.C.'s and Yukon's main competitive advantages. The fact that First Nations are increasingly receptive of mining projects fosters encouraging prospects for the industry and their communities, thereby pointing to a prosperous future for both parties.

Chad Norman Day

President

TAHLTAN CENTRAL GOVERNMENT

"I think the economic benefits could increase, especially on the contracting side. With a Nation like ours, that has its own corporation with amazing operators and people who know the land best, I would like to see our people taking on the bulk of the contracts."

What have been the key topics of engagement between the Tahltan Central Government and the mining industry?

Over the past year, we have pursued thorough communication agreements with exploration companies by which we have set the stage for these companies to come into our communities and meet with all three Tahltan governments twice a year, once pre-exploration season and once post exploration season. We also hold a job fair simultaneously with pre-exploration season meetings. We have quarterly newsletters that update members on these projects and we also have an industry newsletter to inform Tahltans which exploration, logging, and tourism companies operate in their territory, what they are going to be doing over the exploration season, and what employment and contract opportunities there may be. We are trying to set things up so we do things in partnership, with open and honest communication avenues. When we do it that way there is much less mistrust and more sharing of the economic benefits of exploration.

Do you think the current training and government initiatives to empower the Tahltan people are sufficient?

I cannot speak of federal or provincial initiatives. However, last year we created our own employment and training department called TahltanWorks, through which we are setting up a lot of our own training and employment initiatives. The fact that we have started our own department is going to be a huge benefit to the Tahltan people and I give credit to our Tahltan Central Government for its creation. Our goals are to make sure that as a nation, we utilize as many opportunities as possible. We want to have the highest employment of any First Nation in the province and in the country.

Could you elaborate on how the Tahltan people and the Red Chris mine were able to come to an agreement after the opposition and demonstrations in 2014?

Many of the Tahltan people knew about the Red Chris mine from the early stages, however, we did not get an impact benefit agreement until after the mine was built, which was an oversight by the former leadership. When I came on board, after the mine was built, there were tailings issues at Mt. Polley, which caused a lot of fear. To overcome those fears, we had three rounds of meetings. After the tailings pond issue, we took our scientific experts, negotiators, lawyers and representatives to speak about how we were changing the agreement to enhance the environmental provisions, mitigation measures, and the involvement of the Tahltan people in the project. Ultimately, from those changes, the open communication and the benefits package, in April of 2015, they put their trust in the agreement, as well as our leadership, with 87% support in a referendum vote.

Have you noticed any behavioral changes from exploration and mining companies when dealing with the Tahltan government?

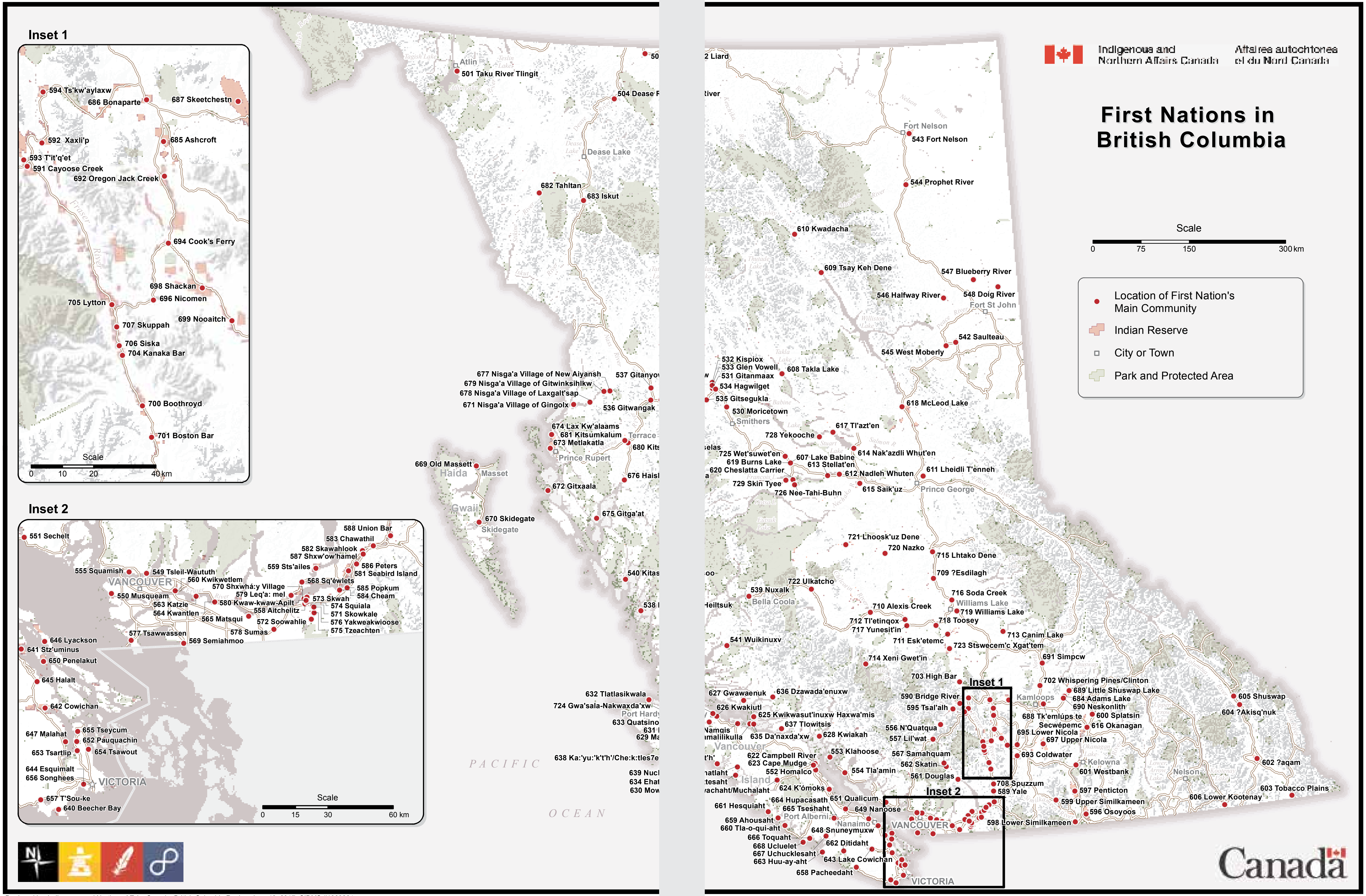
Since I have been involved, the Tahltan government has become much more assertive with the companies. Every year, as our government becomes stronger, our leadership is becoming stronger as well. A combination of these things has allowed us to be assertive and build relationships and trust with these companies. Across the board, we have seen exploration companies more willing to enter agreements with us because they see the value in the agreements and the value in having a partnership with the Tahltans.

What further benefits would you like to see in impact agreements in the future?

I would like to see more co-management benefits that would eventually lead to complete management by First Nations. I think the economic benefits could increase, especially on the contracting side. With a Nation like ours, that has its own corporation with amazing operators and people who know the land best, I would like to see our people taking on the bulk of the contracts.

Do you have a final message for the mining community in British Columbia and our international readership?

The Tahltan Nation is an excellent example of an indigenous group in British Columbia, Canada, and the world, that is building a good system to work with the industry and create more certainty for all stakeholders from an early stage; the key to this is having open communication, respect and entering mining ventures as partners rather than strangers.



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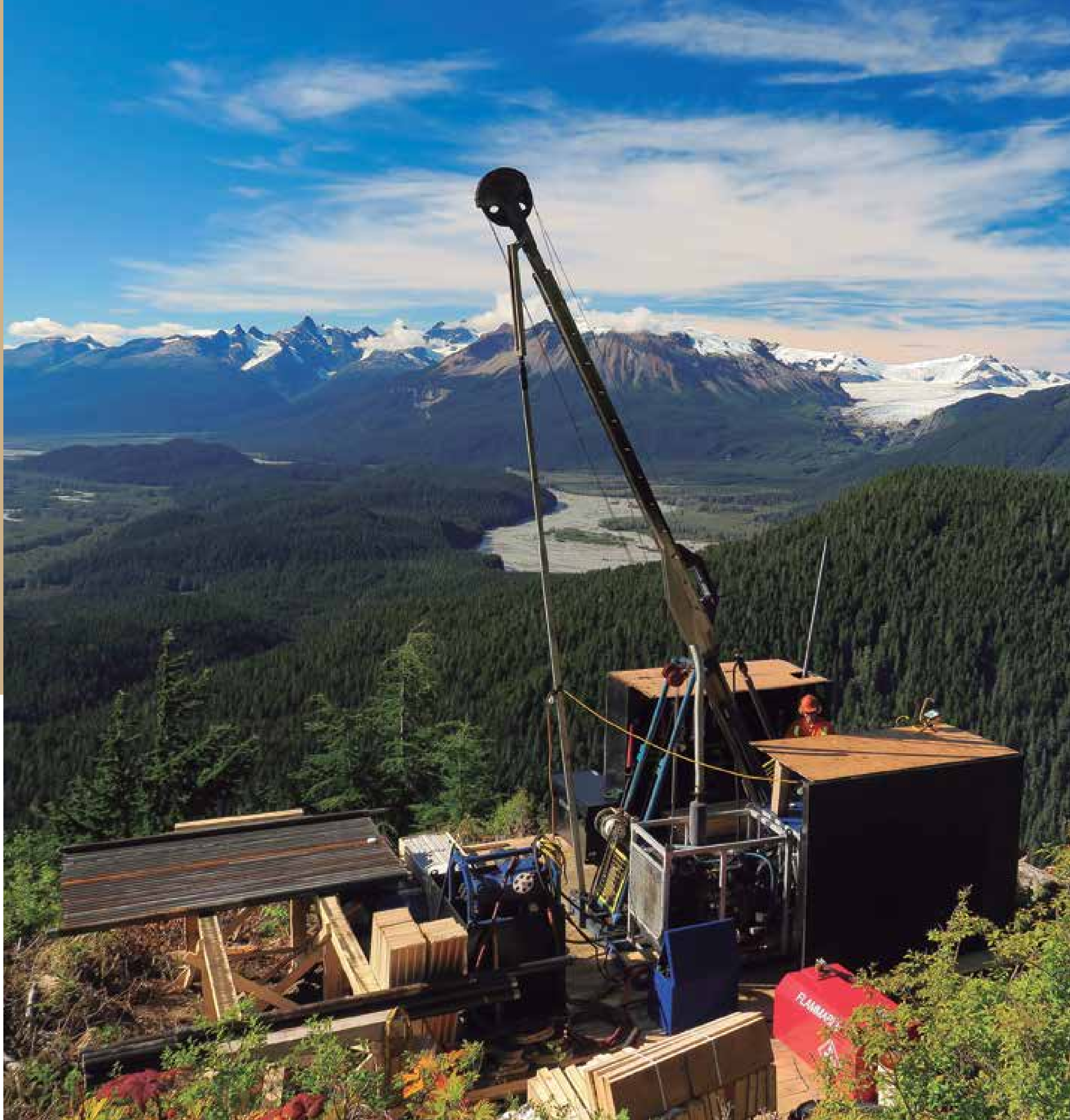

Image courtesy of Skeena

EXPLORATION IN B.C.

"This jurisdiction is politically and environmentally stable, and is very favorable to work in. There is very little risk and our projects are cost effective. These characteristics are very well received by the markets."

- Andrew Bowering,
chairman and director, ML Gold Corp

Exploration in British Columbia

A dearth of financing has not prevented some successful exploration from taking place and drillers are gearing up for a busy season

Over the past three years, attention has largely centered on the struggles of British Columbia's mineral exploration sector, as the number of juniors established in the province has decreased by roughly 30%, thereby reflecting the state of the global mining industry during this time period. Nonetheless, exploration projects in B.C. have silently moved forward and are increasingly garnering attention from investors both local and overseas, drawn by the advantageous conditions that this jurisdiction offers.

The Start of a Busy Season

After leaving behind what was a harsh winter in British Columbia, in 2017 the industry is preparing for what promises to be the busiest drilling season over the past four years. It is no news that exploration activity has seen brighter days, but improving financing conditions, major infrastructure developments, and government incentives have helped juniors and producers push their exploration programs forward.

Market developments over the past 12 months and forecasts for the upcoming year have also helped buoy investors' sentiment. Copper, which accounts for roughly 8% of B.C.'s exports, has experienced a surge of over 30% in its price since hitting an all-time low of \$1.94/lb in January 2016. Analysts expect this spike in copper prices to continue throughout 2017 and are even more bullish in the long run, as global demand for electric vehicles accelerates, together with China and India's middle class expansion. Gains in gold prices, currently hovering above the \$1,200 mark, have also attracted exploration dollars to B.C.'s prolific northwest, a region of striking beauty and immense gold reserves. Following four years of steep declines, coking coal prices have rebounded since 2016, reaching levels last seen in 2012 amid supply concerns from Australia and policy changes from the Chinese government. Even more encouraging is the performance of zinc. Following a gain of 60% in 2016, this commodity has continued its honeymoon with the markets, buoyed by limited supply and higher global demand. These developments have raised the economic feasibility of projects in B.C. From copper porphyry

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Image courtesy of Skeena

Edie Thome

President and CEO
ASSOCIATION FOR MINERAL EXPLORATION

"Investment in [grassroots or early stage exploration] has increased from \$49 million to \$57 million between 2014 and 2016, although spending in advanced exploration declined from \$290 million to \$148 million over the same time period."

Exploration activity in British Columbia is set to increase in 2017 following three years of stagnant activity. What are the driving factors behind this increased dynamism?

We are proud of British Columbia's long, rich history of exploration and development. The sheer knowledge and expertise available across the Province that is housed in more than 800 mineral exploration and mining companies, service and supply companies and academic institutions is a huge advantage and when that comes together with higher prices for metals (particularly for gold, copper and zinc), we see expanded exploration in British Columbia. As an association representing mineral explorers active in British Columbia, we work hard to ensure our members have fair access to the land base and also have all available tools to help them make the best choices related to safety, health, environmental protection and respectful engagement of local communities and Aboriginal peoples.

What are the main deterrents for exploration in British Columbia as expressed by AME's members?

Many issues have been resolved over time with the guidance from our members. AME will continue to listen to members and collaborate with regulators, First Nations and stakeholders to find solutions to current issues. I believe that our members want fair, balanced and workable solutions. Predictability and clarity on the regulatory processes are important. A general, fact based understanding of the importance of successful mineral exploration to responsible mining and the value that that brings to Province and communities is imperative and a goal of the Association. Tax structures that allow exploration and development to continue with certainty are also an area of focus for AME currently.

How is the government cooperating with the industry to foster exploration activity?

In addition to collaborating with industry on solutions to ensure reasonable access to land, the BC government has invested in both geoscientific research through its own BC Geological Survey as well as through a great not-for-profit organization, Geoscience BC. Previously, the BC government has partnered with the federal government on its super-flow through share program, which provides a tax credit for individuals investing in mineral exploration, and we expect this to be continued with the new provincial government in addition to the BC mining exploration tax credit, which encourages corporate investment in mineral exploration. We will continue to advocate for those strong economic support mechanisms.

During the downturn, financing for grassroots exploration projects was scarce, with industry analysts predicting a shortage of this type of projects in the pipeline over the coming years. Do you think this is accurate? What is your assessment on early-stage exploration projects in B.C.?

The downturn – perhaps surprisingly - has brought about a renaissance in grassroots-stage mineral exploration according to data collected by the province of BC in collaboration with AME and EY. Our 2016 survey demonstrated that 73% of respondents were focused on grassroots or early stage exploration. Investment in this type of exploration has increased from \$49 million to \$57 million between 2014 and 2016, although spending in advanced exploration declined from \$290 million to \$148 million over the same time period. What we have also noticed is that companies with established projects – including Pretium at Brucejack, IDM Mining at Red Mountain, Seabridge Gold at KSM and AuRico Metals at KSM – are also investing in further exploration in areas that may be many kilometres, or at the very least a helicopter ride, away from the main deposit but show very promising geology.

For over 100 years, AME has supported the industry in the province. What are your prospects and goals to keep the association's record over the coming years?

The AME staff, with guidance from our vast and accomplished membership, the Executive Committee and the Board will refresh our Strategic Plan for a three-year period that will begin in September 2018. Until then, and in this upcoming year, we will focus on some key areas of the current 2013-2017 Strategic Plan. AME will continue to support a healthy industry by working collaboratively on fair and reasonable access to land for exploration purposes, to ensure appropriate economic mechanisms are available and to further inclusive Aboriginal relationships across the Province. And of course, we will throw an annual Roundup conference that you just can't afford to miss – we look forward to hosting 6,000 from at least 40 countries from January 22 to 25, 2018 here in Vancouver!

"Companies also want on-demand and customizable data reporting. People are becoming increasingly aware of the importance of data, particularly in mining, where data is an exploration company's primary asset."

- Warren Carvey,
business development manager,
acQuire Technology Solutions

Image courtesy of Skeena

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environments to high-grade gold deposits, exploration activity is heating up in this jurisdiction, raising expectations for the new discoveries that the industry desperately needs.

The 2015 completion of the Northwest Transmission Line, a 229 KW project extending 344 km from the Skeena substation near Terracem to a new installation at Bob Quinn Lake, has boosted prospects for the wider northwestern region of B.C., an area that is known for housing some of the province's most important mines, mainly the Premier Gold mine, Snip and Eskay Creek mines. A spur line, the Iskut extension was completed in 2015, extending further north to the Tatogga Lake Substation. Together, these projects represented an investment of over CAD$900 million and are expected to attract industrial development to this previously remote area, particularly from the mining sector.

Government incentives, namely the mining flow-through share tax credit, which allows individual investors to claim an income tax credit of up to 32% when buying shares in mining exploration companies in B.C., has also been largely beneficial for juniors and has helped sustain exploration activities during the downturn.

Attention Shifts Northwest

The so-called Golden Triangle in northwestern B.C. will host the most extensive drilling programs in the province. Over the past decade, this region has attracted the bulk of exploration investments and has seen major projects move forward, such as IDM's Red Mountain, Pretivm's Brucejack and Seabridge's KSM.

Ascot Resources' plans for this season include 120,000 meters of surface drilling to establish an initial 2 to 3 million oz. high-grade gold resource at its Premier/Dilworth property. An additional 20,000 meters of underground drilling will explore grassroots targets in the northern portions of the property. Ascot's program will be one of the most extensive in the province this year, with the company eyeing an eventual 10 to 20 million oz. gold resource. The property's privileged location, together with significant resource potential and the company's advantageous assets, led to a $20 million investment from Eric Sprott last year. This investment altered Ascot's plans at Premier/Dilworth and showcases the region's attractiveness for investors. "Before the Sprott investment, our only realistic way forward was to define a reserve on a small portion of the property, go into production on that and use the resulting revenue to explore the rest of the property. Now, we have the luxury of being able to keep exploring first, which is less dilutive and our preferred route…we think that with the underground drill program we can come up with a near term high-grade underground operation. This will be our focus for 2017," declared Robert Evans, CFO and director at Ascot Resources.

Nearby, positive results continue for Seabridge at its KSM project. With reserves reaching almost 39 million oz. of gold and just over 10 billion tonnes (mt) of copper, Seabridge is now looking to expand its Iron Cap zone at KSM, already the world's largest undeveloped gold project. Results at Iron Cap from 2016 yielded a gold grade of 60% higher than the existing gold reserve grade and a copper grade 20% higher than the current copper reserve grade. New discoveries this season will continue to add value to Seabridge's shareholders, an important focus for the company throughout the development of KSM. "Our strategy is designed to provide maximum leverage to the gold price. We do that through the concept of increasing our gold resource ounces on a per share basis. If we raise funds for drilling or acquisitions, we expect to offset the equity dilution with accretion to ounces. We have been successful on this objective for almost 18 consecutive years," stated Rudi Fronk, chairman and CEO at Seabridge.

Earlier stage projects will also enjoy a busy season. OK2 is expected to complete approximately 3,500 meters of RC drilling and perform preliminary diamond drilling of up to 2,000 meters on the West Zone of its Pyramid property, located north of the

"The terms of the joint venture deal with Antofagasta are mutually beneficial. They are receiving 500 square kilometers of prospective ground in the Golden Triangle. It is a 13-year deal, and if Antofagasta goes to the end of that term, there is an average of $3 million in expenditures each year."

- Paddy Nicol,
president & CEO,
Evrim Resources

"Companies are coming back to Canada, where exploration has been picking up lately. Geopolitical risk and security are becoming more of an issue as of late and companies are shifting their attention to deals that are secure in the long run."

- Harlan Meade,
president and CEO,
Copper North Mining

> "Activity has centered in the north of the province and into Yukon and the Northwest Territories. Companies are looking for the next big mine and since most of the bottom half of the province is thoroughly explored, attention has focused in the north. I think this trend will continue in the coming years."

- James Hume, president, Eagle Mapping

Golden Triangle region. The company has already spent roughly $4 million in exploration work, using the most successful techniques for porphyry exploration in the Quesnelia Terrane, where the province's largest copper-gold porphyry deposits are located. OK2 will also conduct a detailed evaluation of its Kinskuch property, consolidated in October 2016. On taking the project forward, James Currie, president and COO commented: "Small work programs were done at Pyramid every year starting from 2013, but because of adverse mining conditions, most of the funding came from the officers and directors of the company, as well as friends and family. Every work program has resulted in the discovery of new mineralization and we now realize that Pyramid is a large copper-gold porphyry system".

Likewise, Aben Resources expects a busy drilling season at its Forrest Kerr property. Previous exploration work at the property had focused on finding a VMS style of deposit but the region has opened up to structurally controlled hydrothermal high-grade quartz systems, following Pretivm's success at Brucejack. Over 100 holes have been drilled in the three properties that now make up Forrest Kerr. Aben has already assembled this information into a single data compilation study and this year's drilling program intends to concentrate on three areas to confirm results from previous work, which includes a historic hole that intercepted 22.4 g/t gold over 11 meters in the northern area of the property. Jim Pettit, president and CEO at Aben, highlighted the importance of previous work performed in properties across B.C., as well as the advantages of operating in the province: "[B.C.] offers stability, which is a key point, together with the geography. Another advantage is the quality of the people that you find. If you are going to perform exploration work, you definitely want to find projects that have a history and lots of data, which you can remodel and use for future work. It is important to have projects with background, as pure grassroots projects are tough to sell unless there is a very strong market sentiment.

Similarly, Metallis Resources has assessed geological and geochemical data for its Kirkham property, where the company will perform a summer drilling program to identify porphyry and shear-vein targets. Fiore Aliperti, president and CEO at Metallis, is positive about the company's prospects for this year and has highlighted the potential at Kirkham, situated just 20 kilometers from the famous Eskay Creek

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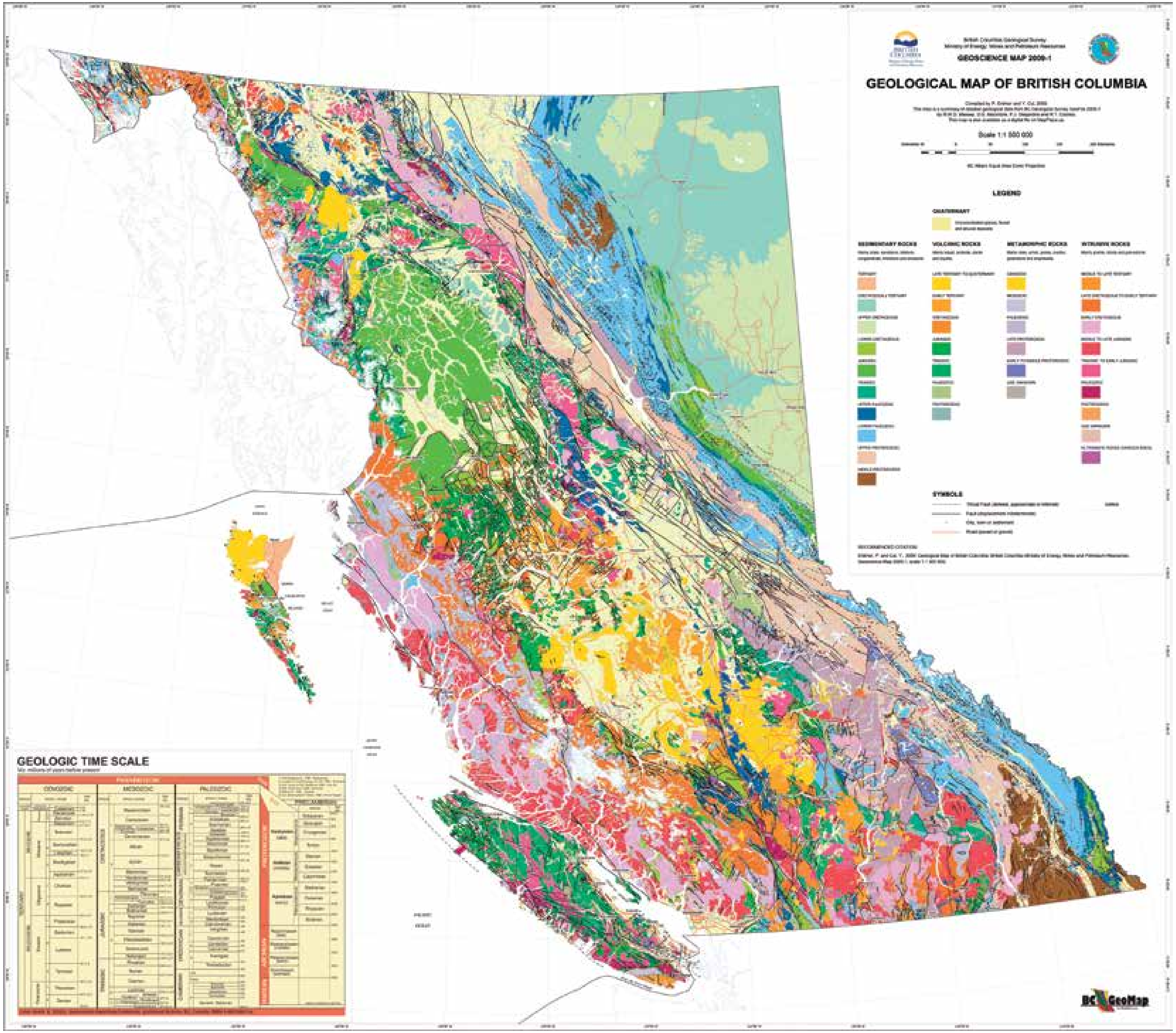

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mine: "Our team has identified some highly prospective targets. These targets are consistent geologically with two of the most productive deposit types in the Golden Triangle region... We are very excited at the prospect of having multiple chances to find an economic deposit on our property capable of bringing substantial returns to our investors."

The importance of historical data, readily available and integrated by the British Columbia Geological Survey, remains a major advantage for juniors and prospect generators in the province at a time when data is increasingly considered as an asset of utmost importance for decision making prior to acquisitions and investment decisions. In this regard, Robert Cameron, president and CEO of Commander Resources noted: "Our business model is particularly effective in British Columbia because the government has datasets available that we leverage to find new projects, which is lacking in most jurisdictions…the provincial government is also very supportive through providing mining infrastructure and developing new geoscience databases."

Commander Resources has four property assets in B.C., of which the October Dome gold skarn property is the most advanced. Furthermore, the company's most advanced royalty is the Boundary Zone of its Mount Polley project, currently held by Imperial Metals. Commander owns 90% of that royalty, although production is not scheduled until 2026.

Following the downturn in the industry, prospect generators are looking at innovative ways to add value to their project portfolio in order to lure investors and secure partnerships. Pacific Empire Minerals has successfully done so by acquiring its own RC drill and adding value to its properties in the form of drill data. "We are always looking for partnership opportunities but one of the challenges for prospect generators is deal flow and deal terms. Because of current market conditions, it can be challenging to secure partnerships, but we believe that by adding significant value to certain assets we will be able to achieve favorable terms with multiple partners. To accomplish this, we intend to add value in the form of drill data. For this, we purchased an RC drill. We believe that during 2017 we will be able to identify our best targets for partner-funded advancement in 2018," declared Brad Peters, president at Pacific Empire Minerals.

Prospect generators typically investing outside of British Columbia have been lured by the Golden Triangle's growing attractiveness and major developments. Such is the case of Millrock Resources, a company with properties in the United States and Mexico that has entered this northwestern region of B.C. Speaking about the opportunities for the company, Gregory Beischer, president and CEO at Millrock notes: "We very recently acquired mining tenures in the Stewart, Golden Triangle area in B.C., which is a new move for us. This is a hot exploration and mining area; there have been some wonderful discoveries and a lot of exploration activity in the district. We acquired large district-scale land packages by consolidating lands owned by individuals or companies that could not afford to keep going…We amassed all exploration information and plugged it into our database and Geographical Information system. We have now begun to do some geophysical work on the properties ourselves".

With an extensive property portfolio in British Columbia, Colorado Resources has good reasons to be optimistic about its properties in the Golden Triangle. During the downturn, the company struggled to keep exploration programs moving forward but has embarked on the changing tide taking place since 2016. Adam Travis, CEO at Colorado elaborates on the company's new gold project, KSP: "The project is located in the heart of the Golden Triangle, and it is approximately 300 square kilometers. With the completion of $6 million in exploration work, we will have reached 51% ownership of the project, and our goal is to reach 80% ownership. In 2014, the British Columbia government's geologists visited the site, remapped the area, and determined that the geology is very similar to Seabridge Gold's KSM mine and Pretivm's Brucejack Mine. Despite the downturn we have been able to keep the project in good standing."

Although the Golden Triangle area is still

Paddy Nicol

President & CEO
EVRIM RESOURCES

What are the advantages of your Ball Creek joint venture?

The terms of the joint venture deal with Antofagasta are mutually beneficial. They are receiving 500 square kilometers of prospective ground in the Golden Triangle. It is a 13-year deal, and if Antofagasta goes to the end of that term, there is an average of $3 million in expenditures each year. They will earn up to 70% over that time, and Evrim will be the operator of the project for the first five years. The deal really shows that major joint venture partners can be brought into the region, as they are the first major company to enter in the past decade. This is attributable to all of the research and development that has taken place in the region over the past few years, as well as the new high-power transmission line and successful First Nations negotiations. We worked hard to partner with a company like Antofagasta that has the financial wherewithal to support a broad based regional program at Ball Creek. Typically, juniors have to drill and hit something significant mineralization right away in order to attract investment.

What are your plans for continued investment in British Columbia?

In December 2016, Evrim picked up the Axe project in southern British Columbia. This project was taken over from a company under distress during the downturn. We decided to invest in high-quality projects that have had good work done in the past but perhaps were not followed up on as a result of the downturn, and the Axe project fits this profile. We have begun reinterpretation work on the property, and we plan to follow up in the spring and prepare it for a potential joint venture partnership. The Golden Triangle is still very attractive to us, but the uptick in the market has made assets more expensive. Regardless, in British Columbia our focus will remain on copper porphyry targets.

How has the First Nations negotiations process been for Evrim?

We believe that a successful outcome can be achieved between First Nations and industry as long as there is a respectful dialogue between both parties. That said, Evrim has a very early-stage presence in the area, and we have not yet begun drilling or carrying out operations of any significance. We engaged early with the Tahltan nation, and we hired a consulting firm to help us facilitate a discussion and negotiation process that we expect will happen soon.

Jamie Lyons

Owner
ATLAS DRILLING

Could you please give us an overview of Atlas Drilling?

Since we aquired Atlas Drilling in 2006, we expanded from three rigs to just over 30. We originally only had skid-mounted drill rigs, but when we purchased F Boisvenu Drilling, this gave us underground and fly drilling capabilities which we have expanded dramaticly. Underground mining has been in higher demand in parts of British Columbia recently because it is more cost-effective than surface or fly drilling. We operate in most of the major mines in British Columbia, including Red Chris, Mount Polley, Gibraltar, and Afton. We also own Interior Helicopters, which makes it easier for us to supply an all in one service and a fast parts delivery. Equipment and parts supply is one of the biggest challenges to operating in remote locations.

What is Atlas's competitive advantage?

Atlas relies on our experience, job completion and our cost effectivness for new business, but we also focus heavily on safety and enviromental responsibility, which is becoming increasingly important for mining companies and their shareholders. Our safety budget has seen a significant increase over the years. We have also heard that, with all of the drilling expected to happen this summer, there will be a shortage of diamond drills and crews. Mining companies sometimes buy their own drills when they cannot afford the service, but that can end up being more costly without the expertise available from experienced companies. An added advantage to having so many drills is that we can always replace one very quickly if a signifagant repair happens which cuts any downtime, and this makes us more reliable to our clients. In the process of being very accessible for our clients, we are available 24/7. Clients also appreciate the diversity of our equipment, and we typically have a drill available for any type of project. If we do not have a drill, we will get it, and if we cannot get a drill, we will make it.

"British Columbia does an excellent job on the front-end with exploration incentives, most notably through flow-through tax credits, and we have some of the best geoscience in the world through the British Columbia Geological Survey, the Ministry of Energy and Mines, and others.

- Adam Travis,
CEO,
Colorado Resources"

dominated by juniors, majors are starting to become more active in the region, either by new partnerships or existing royalties. Barrick Gold has worked with Skeena resources since the latter acquired the Snip gold project in March 2016. In this regard, Walter Coles, president and CEO at Skeena, commented: "Barrick Gold inherited the asset when they acquired Homestake Mining Company in 2001…[Barrick] is not interested in a mine that might only produce 100,000 to 150,000 ounces per year, but they will get royalty payments if we go into production. Also, if we make a new discovery over 2 million oz., Barrick has the ability to buy back 51% of the company at three times our cumulative expense. The deal was structured as a win-win for both companies."

Skeena Resources envisages a drilling program of 15,000 meters of surface and underground drilling at Snip this year, which should lead to an initial 43-101 resources estimate in late 2017. Moreover, during the second quarter of 2017, the company filed a technical 43-101 for its Spectrum-GJ copper-gold project, also located in the Golden Triangle. Skeena is currently evaluating and assessing the development of Spectrum-GJ, which already counts with a preliminary economic assessment.

Another major development in this regard is Antofagasta's entry to the region. The London-based major has signed a joint venture with Evrim Resources to develop the Ball Creek property, located just 60 km. southwest of Imperial Metals' Red Chris mine. Elaborating on the terms of the deal, Paddy Nicol, president and CEO at Evrim noted: "The terms of the joint venture deal with Antofagasta are mutually beneficial. They are receiving 500 sq. km. of prospective ground in the Golden Triangle. It is a 13-year deal and if Antofagasta goes to the end of that term, there is an average of $3 million in expenditures each year. They will earn up to 70% over that time and Evrim will be the operator of the project for the first five years. The deal really shows that major joint venture partners can be brought into the region, as they are the first major company to enter in the past decade."

Other Golden Triangles

Fortunately, exploration activity is far from confined to the Golden Triangle, as companies look at projects throughout the province benefitting from existing infrastructure, closeness to operating sites and vast potential. These characteristics can be found at ML Gold's Pinnacle Reef property, located just 50 km northwest of Centerra Gold's Mount Milligan Mine. The company signed an option agreement with Pacific Empire Minerals to perform exploration work on the property, previously known as Later. Since then, ML Gold has performed an IP survey in the property, yielding a perfect donut-shape anomaly, typically associated with large porphyry systems. "The property contains a 7 x 6 km IP chargeability anomalous area, with an alkali gold-rich copper porphyry target, similar to the discoveries that led to Red Chris and Mount Milligan. We have identified the structure at the center of the pyrite halo system of 2 km wide, which will be the primary target for exploration. We are fully funded to perform our drilling program this summer, which consists of four 700 meter NQ core holes," stated Andrew Bowering, chairman and director at ML Gold Corp.

British Columbia's location along the Pacific Rim has helped it secure investments from Asian powerhouses that regard projects in the region as highly attractive given the appetite for commodities of their economies. Last year, Serengeti Resources reached an agreement with the Korean trading company Posco-Daewoo Corporation for its Kwanika copper-gold project, located near the city of Fort St James in central British Columbia. "Daewoo invested $1.2 million for a 5% direct interest in the project…the investments went principally toward drilling, which yielded some very encouraging results", stated David Moore, president and CEO at Serengeti.

In the Kootenay Arc region of southeastern B.C., Margaux Resources is developing its polymetallic property portfolio, including gold, lead-zinc, tungsten, silver, bismuth and molybdenum. Margaux's four properties stand in close proximity to each other, thereby making it possible to consolidate assets and share infrastructure. This model has proved promising for the company. "We are looking to acquire more properties and our aim is to stay within the region of our existing portfolio and continue to consolidate our core area of interest… Once we bring all of our resources under a 43-101, we will then commence a pre-economic assessment followed by a pre-feasibility. We do not have a lot of overhead expenditures and our fundraising goes toward groundwork. In 2017, we plan to spend $1 million on drilling at the Jackpot, Bayonne, and Sheep Creek properties," stated Ryan Bignucolo, vice president of business development at Margaux.

Stories of impressive turnarounds are starting to become more common as the industry leaves behind the downturn. In this regard, EnGold Mines serves as a noticeable example. The company's Lac La Hache property, in the Cariboo region of B.C., has

"The B.C. government has invested wisely in the energy and transportation infrastructure our industry needs to proceed with major projects. There are firm guidelines that the proponents, regulators and the First Nations can rely on in the environmental approval process.

- Rudi Fronk,
chairman and CEO,
Seabridge Gold"

yielded impressive results which have garnered attention from the markets. As a result, EnGold now has a dual exploration focus in the property with encouraging gold, copper, silver and magnetite potential. David Brett, president and CEO at EnGold, expressed notable optimism on the project's prospects: "We see our new copper/gold/silver discovery area and the Aurizon Gold zone as having high grade, low cost underground potential. The lower footprint and capex of underground operations relative to open pit mining has garnered them growing respect in the markets."

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British Columbia's Mineral Exploration Tax Incentives

Jonathan Buchanan,
Director, Information & Public Affairs, Association for Mineral Exploration

British Columbia's tax incentives for mineral exploration are available to individual investors as well as corporations, active members of partnerships and individuals conducting grassroots mineral exploration. Such tax incentives have facilitated mineral exploration across British Columbia, but particularly in areas such as the province's Golden Triangle and other remote areas.

Individual Tax Credits – Flow-Through Shares

Flow-through shares are seen as a uniquely Canadian way to attract investment in resource development. The incentive program allows a company to fund its qualifying Canadian Exploration Expenses (CEEs) through an individual's investment in shares in the company incurring the expenses by flowing those CEEs to the investor directly to deduct against other individual taxes. In addition to the CEEs, the individual receives a tax credit at both the federal and provincial level. These are commonly referred to as "super flow-through" shares.

At the federal level, the government provides a non-refundable 15% federal Mineral Exploration Tax Credit (METC), which is harmonized with most Canadian provinces. In British Columbia, for example, individuals can claim a non-refundable tax credit (BC MFTS) equal to 20% of their British Columbia flow-through mining expenditures, and together, the METC and BC MFTS can result in a combined investment tax credit for an individual resident in British Columbia of approximately 32%. [1]

Flow-through shares are not simply popular; they are seen as vital to the Canadian mineral exploration industry. In fact, more than 80% of respondents to a recent PDAC survey stated that flow-through shares and the associated federal METC for individuals are critical to their survival and a direct incentive to attracting and sustaining further investment. Furthermore, 61% said the dollars raised have led to new discoveries, providing economic stimulus in typically more remote areas of the country that include Aboriginal communities.

Although these tax credits are aimed at Canadian investors, the ensuing exploration increases the companies' attractiveness to overseas investors as well. Both the BC MFTS and the federal METC have been renewed annually via the provincial and federal budgets, as they are seen as a vital component of government support of the mineral exploration and development industry. All major parties in both the federal 2015 election campaign and the British Columbia 2017 election campaign, for example, pledged their support of flow-through shares in their platforms.

Corporate Tax Credits

Corporations and active members of partnerships conducting grassroots mineral exploration in British Columbia may qualify for tax credits as well. In British Columbia, the Mining Exploration Tax Credit (BC-METC)[2] is calculated as 20% of qualified mining exploration expenses less the amount of any assistance received or receivable.

To be eligible, qualified mining exploration expenses must be incurred before January 1, 2020 for determining the existence, location, extent, or quality of a mineral resource in British Columbia. The credit applies to exploration for all base and precious metals, coal and some industrial minerals.

Over the past ten years starting in 2007, an enhanced rate of 30% has been available for qualified mineral exploration undertaken in areas affected by the mountain pine beetle.

Inclusion of Costs Incurred for Environmental Studies and Community Consultations

The Association for Mineral Exploration (AME), together with the Prospectors & Developers Association of Canada (PDAC) has advocated for the inclusion of costs incurred for environmental studies and community consultations as CEEs eligible for both provincial and federal tax incentives. This eligibility was recently confirmed in January 2017 through the revision of federal legislation to include in the definition of CEE:

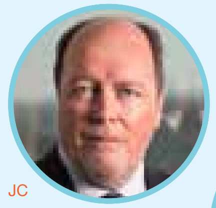
"…an expense incurred for environmental studies or community consultations… to obtain a right, license or privilege for the purpose of determining the existence, location, extent or quality of a mineral resource in Canada." Further, the Canada Revenue Agency released updated guidance as to the application of these rules for Canadian taxpayers.

AME supports and applauds the changes to federal legislation allowing for exploration companies to include certain environmental and community consultation costs as CEE. The tax incentive programs offered and the amendments to tax legislation are a clear recognition by the federal government of not only the increasing expenditures allocated to exploration budgets by companies in these areas, but more importantly properly engaging with Aboriginal peoples and the importance of environmental stewardship. This view is shared by AME. Tax incentives allow for economic development in remote areas that, in the absence of those tax incentives, may not see any substantive exploration activity and as a consequence, the benefits that accrue to the communities affected.

[1] To the extent the individual is subject to individual income tax in British Columbia.
[2] Not to be confused with the federal METC non-refundable tax credit offered to individual investors referred to earlier in this article.

James Currie & George Cavey

JC: President and COO
GC: Vice-President Exploration
OK2 MINERALS


JC


GC

Can you provide a brief overview of OK2?

JC: Most of our group had previously worked together with a company called Orko Silver Corp, which developed a large silver project in Mexico that was sold to Coeur Mining in 2013. After Orko Silver was sold, the group acquired a shell called Gold Jubilee Capital Corp. and started performing grassroots exploration work in the Golden Triangle area of northern British Columbia, on what is now the 186 km2 Pyramid property. Small work programs were done at Pyramid every year starting from 2013, but because of adverse mining conditions, most of the funding came from the officers and directors of the company as well as friends and family. Every work program has resulted in the discovery of new mineralization and we now realize that Pyramid is a large copper-gold porphyry system. At the time, we were also looking for opportunities abroad but we ultimately decided to forego them and focus on Pyramid. The opportunity to acquire a second project, in Northern BC arose and we now hold 50 km2 in the Kinskuch Lake area at the south end of BC's Golden Triangle. In the fall of 2016, we decided to re-brand the company and we came up with the OK2 name as a link with the old Orko Silver. Interestingly, Orko's old trading symbol "OK" was still available, so we were able to secure that as OK2's trading symbol.

What type of existing infrastructure is ready for use at these properties?

GC: Kinskuch is located just north of the old Kitsault molybdenum mine, there is a road and a hydro dam that service the area as well as other logging roads east of the property. Highway 37 is located within the western edge of the Pyramid property and the new BC government financed powerline to the new Red Chris mine is only 100km south of our property.

Also in southern British Columbia, Evrim Resources is involved in early exploration work at its 100%owned, 50 km2 copper-gold Axe Project, located 30 kilometers north of Copper Mountain's namesake mine. The company highlights the property's favourable location, together with promising mineralization to attract partners for its development, as Evrim has successfully done for its projects. Paddy Nicol, president and CEO at Evrim explains the company's rational behind the Axe acquisition: "We decided to invest in high-quality projects that have had good work done in the past but perhaps were not followed up on as a result of the downturn, and the Axe project fits this profile. We have begun reinterpretation work on the property, and we plan to follow up in the spring and prepare it for a potential joint venture partnership."

Optimism amid increased activity from mining companies and juniors has already reached service providers. Atlas Drilling, a company that has performed work in most of the major mines in B.C. such as Red Chris, Gibraltar and Afton. Jamie Lyons, owner of Atlas drilling, stated: "The market is certainly more optimistic this year compared to the last few years and there appears to be more money circulating around the sector. There may be a bit of a lag this year but, by 2018, drillers should be back to making money. There are a lot of great projects in British Columbia that have had great drilling results but not enough funding, so hopefully they are able to move forward soon."

"[B.C.] offers stability, which is a key point, together with the geography. Another advantage is the quality of the people that you find. If you are going to perform exploration work, you definitely want to find projects that have a history and lots of data, which you can remodel and use for future work."

- Jim Pettit,
president and CEO,
Aben Resources

Walter Coles

President & CEO
SKEENA RESOURCES LIMITED

How has Skeena Resources aimed for success during the mining downturn?
Skeena Resources has multiple projects, all of which are in different stages. One of our main themes has been contrarianism. When the market was down a couple of years ago, we thought it was a good opportunity to buy assets. The key to dealing with the mining industry's volatility is buying when no one is interested and selling when the interest returns. Another theme has been avoiding grassroots exploration and only pursuing post-discovery assets where, through our expertise, we see a path to make the deposit much bigger. A third theme has been paying as little for new assets as possible to mitigate risk. Our Snip project is an example of this model being successful. We paid just over 2 million shares upfront, that equated to about $150,000, for a project that had not produced gold since the 1990's, when nearby infrastructure was poor, operations were costly, and gold prices were declining significantly. Today, gold prices are much higher, and infrastructure in the Golden Triangle has vastly improved. Additionally, we already know the gold is there and that it is high-grade, so our biggest risk is simply trusting the data we have collected. Gold mining is still an extremely risky business, but our goal is to try to protect against the commodity price risk. Also, the fact that our chairman, Ron Netolitzky, has discovered some of the highest-grade mines in the province has instilled confidence in our investors.

Do you have any plans to expand outside of the Golden Triangle?
Skeena Resources is always open to evaluating new projects, but we are thus far content with our location in the Golden Triangle. Projects that are close in proximity to each other are at an advantage because assets from multiple projects can be consolidated. Snip and Spectrum-GJ are only a 20-minute helicopter ride from each other, so it is also easy to shift people or resources back and forth.

Jim Pettit

President & CEO
ABEN RESOURCES

What are your longer-term plans for Forrest Kerr?
There are three to four areas that we want to concentrate on. We want to confirm and analyze what has already been drilled. There is an area that we think has a similar geography to Pretivm but so far has the least amount of information. We spent $100,000 at the end of last summer on sampling and various field work. It is a question of spending money wisely and having the success early in the program. The long-term plans will really depend on our success early.

What are Aben's plans for its Yukon properties this year?
At one point we had six properties in Yukon, with the Mackenzie Mountains being a primary focus. However, when activity slowed down in the Yukon we narrowed our area of opportunity to the Justin Property. We decided to concentrate our efforts on the eastern side of the Yukon, where the Justin Property is located. This Property is tied on to Golden Predator's "3 Aces" project where they are having quite a bit of success. Back in 2012 we discovered the POW Zone on the Justin Property. We drilled 12 holes during that program and all the holes that were completed to target depth on the POW Zone intersected gold mineralization. This system is identified as a very large intrusion-related gold system (IRGS). The majority of the intrusive stock and its surrounding contact aureole have yet to be tested and remain high priority targets for future exploration and drilling.

What are your prospects for the next couple of years?
We still have to consolidate 100% ownership at Forrest Kerr. The prospects for the properties that we have are good and we emerged in a good shape at the end of the recent down cycle. We plan to keep the momentum we gathered and take the projects forward, since you want good news before you go back to the markets. With the right strategy, the chances of success are higher. Having 3 projects helps with the chances for success and it allows us to work on a year-round basis which is also better from a market perspective.

Robert Evans

CFO and director
ASCOT RESOURCES

Can you provide an overview of Ascot's projects?
Ascot acquired an option on the Dilworth property in 2007 and the contiguous Premier property in 2009. The Premier/Dilworth is our flagship property. It is a world class, high-grade gold and silver prospect in the Golden Triangle area of northwest British Columbia. We own our own diamond drill rigs and our drill costs are about a third of the industry average. These low costs are mainly due to the fact that the property is accessible by road from the nearby town of Stewart, the elevation of the property is low and, as Premier was a past producer, there is existing infrastructure in place.
Last year, we received an investment of $20 million from Eric Sprott. This money will be spent in 2017, we expect to do 140,000 meters of surface drilling and 27,000 meters of underground drilling. I believe this will be one of the largest drilling programs in the province. When we first started work on the property, we focused on the northern portion, defining a bulk tonnage target. We have a resource there of about four million oz. of gold, which represents about 30% of the total northern target. We are now focused on the southern part of the property, around the old Premier mine which is substantially higher grade. The reason we had not started at Premier was the wealth of existing data on this part of the property that needed to first be compiled in to an up-to-date database.
Before the Sprott investment our only realistic way forward was to define a reserve on a small portion of the property, go in to production on that and use the resulting revenue to explore the rest of the property. Now, we have the luxury of being able to keep exploring first, which is less dilutive and our preferred route.
Premier/Dilworth is a 105 sq. Km. property and this year's drilling program is designed to come up with a high-grade resource of between two to three million oz. gold. We think, with the underground drill program, we can come up with a near-term high-grade underground operation. This will be our focus for 2017. In the bigger picture, we think, there is potential for a 10 to 20 million oz. gold resource on the property.
We have a very loyal base of shareholders who year after year kept us financed through the downturn.

How have shareholders reacted to these developments?
The shareholders regard recent developments as a validation of our asset. The property has huge potential but for a long time during the market downturn it did not receive much interest. Progress was slower than we would have liked but now, we believe, we have exciting times ahead of us. The major mining companies are telling us that they have done all their trimming and asset disposals and are now looking to see where their future production will come from. This is where Ascot is ahead of the game because, unlike many juniors, we were able to advance our project during the downturn. 2017 will be a very telling year for Ascot.

Brad Peters

President
PACIFIC EMPIRE MINERALS

Can you provide an overview of Pacific Empire?

Pacific Empire began as a private company in 2012 and since has been focused on the acquisition, advancement, and discovery of high-quality gold-rich copper porphyry assets in British Columbia. Our strategy during and post downturn has been the prospect generator for business model. We have been very fortunate to have supportive shareholders that have allowed us to take advantage of the situation and remain aggressive during the downturn. We were able to acquire assets that we identified and advance them to the best of our capabilities during those market conditions.

How is your property portfolio structured?

We now have 10 properties. We started out with one project and over the course of four years we have identified opportunities and added them to the portfolio. We prefer to stake ground but we are also open to partnerships and joint ventures. Three of our properties stand out as being at a more advanced stage, these are Later, Wildcat and the Red JV. On the Later property, we were fortunate to attract OZ Minerals as a partner in 2014. It is a covered target where OZ completed three IP surveys over a large area and in two of these survey areas, identified large chargeability anomalies. OZ then drilled six holes in two areas, with the first hole intersecting intriguing intervals of anomalous gold in an area that had never been drilled. However, they decided to drop the option as they were focused on copper. Subsequently, we signed an option agreement with ML Gold Corp and in 2016 they completed three drill holes, all intersecting anomalous intervals of gold mineralization. We expect them to return in 2017 and test the northern portion of this target area. On Wildcat, we recently completed IP surveys over a new target area are looking to test this new chargeability anomaly with RC drilling in 2017. We have a JV agreement with En-Gold Mines at the Red JV property and are looking forward to advancing this project as well. Remaining projects will be advanced by Pacific Empire during 2017 with RC drilling.

Are you exploring further partnership opportunities?

We are always looking for partnership opportunities but one of the challenges for prospect generators is deal flow and deal terms. Because of current market conditions, it can be challenging to secure partnerships, but we believe that by adding significant value to certain assets we will be able achieve favorable terms with multiple partners. To accomplish this, we intend to add value in the form of drill data, especially newly acquired RC drill data. For this, we have purchased an RC drill, currently in production and scheduled for delivery shortly. We believe that during 2017 we will be able to identify our best targets for partner funded advancement in 2018. —

Andrew Bowering

Chairman and Director
ML GOLD CORP

Can you provide us with an overview on the Pinnacle Reef (formerly Later) project?

Pinnacle Reef, formerly Later, is ML Gold's current priority. Two years ago, our geologist came across with an opportunity in the prolific Quesnel Terrane in central British Columbia. OZ Minerals had performed exploration work on the property in 2015 and they were vectoring towards something more significant. From the onset, the idea was to continue drilling, as we had to spend exploration money to get an interest in the project. This was appealing for us, as we are constantly looking for new opportunities. Interestingly, after our first three drill holes we realized we were moving away from an intrusive event. We decided to seek old data and we found that in 1989 BP Minerals performed an extensive IP survey in the northern part of the property before shelving the project and leaving B.C. altogether. When we reviewed the old IP data, we realized there was a perfect donut-shape anomaly, which is the shape that the best porphyry systems tend to have. Ever since that discovery, we realized we would not have issues to raise money and scale up our exploration program.

What have been the major developments since then?

The property contains a 7x6 kilometer IP chargeability anomalous area, with an alkalic gold rich copper porphyry target, similar to the discoveries that led to Red Chris and Mount Milligan We shot four lines of IP just a month ago and we have identified the structure near the center of the pyrite halo system of 2 kilometers wide, which will be the primary target of exploration. We are fully funded and permitted to perform our drilling program this summer, starting in July. The program consists of four 700-meter NQ core holes. It is a very exciting project because if we find what the data suggests, this will have a great potential. Moreover, the project area counts with great infrastructure in regards to roads and power accessibility.

What are the advantages of operating in B.C.?

This jurisdiction is politically and environmentally stable, and is very favorable to work in. There is very little risk and our projects are cost effective. These characteristics are very well-received by the markets. As a company, we are always looking for expansion, particularly in northwestern United States and in British Columbia. —

Robert Cameron

President & CEO
COMMANDER RESOURCES LIMITED

What were Commander Resources' main developments during the mining downturn, and in what shape did the company emerge from it?

Like most junior companies, Commander Resources struggled throughout the downturn, and we experienced repeated downsizing of land, office space, and personnel. We entered the downturn with a strong asset base, but to survive it, we liquidated and monetized some of the shareholdings we had in other mining entities. In 2016, we were also able to monetize some of our Aston Bay shares as part of the project restructuring which brought in $1 million, and gave us enough money in our treasury to start doing significant work again. Our focus in 2016 was to revisit our old properties, bring them up to current status in terms of data management and land maintenance, and then start an aggressive marketing program to bring in partners for our projects. We also added to our portfolio when we acquired four properties and royalties from Bearing Resources. Commander Resources now has twelve properties, a strong royalty portfolio, and a significant number of shareholdings. We follow the prospect generator business model, which focuses on protecting the capital structure of the company. We typically advance our projects to the pre-drilling stage and then partner with other companies for the heavy lifting. That way, we collect option payments, share payments, and possibly royalty payments. The goal of this business model is to live off these payments so as to avoid another financing round and to expose shareholders to multiple exploration plays.

Can you please give us a brief overview of your British Columbia projects?

Commander Resources has four property assets in British Columbia. We recently acquired the Rebel zinc property, we have a legacy property called Ominica, and our two flagship properties are the Mount Polley copper porphyry and October Dome gold skarn properties, the latter of which is the most advanced. We are in the process of finding a partner to help take it to the next stage. The Rebel property is an example of a property we found through data mining. We leveraged government mineral occurrence databases, regional stream geochemistry databases, and geological databases to select the property for acquisition. The entire process from concept to acquisition was done from our office. We are always looking for additional assets this way. We have been approached by companies interested in reviewing the data on the Rebel property. Rebel is the least advanced property we currently have, but it has zinc, which is very topical right now. We currently have seven projects in our royalties portfolio. The most advanced project in the portfolio is a Teck project in central British Columbia that has a small but steady cash flow. The next-most advanced royalty is the Boundary Zone of our Mount Polley project that Imperial Metals now holds, and we own 90% of that royalty. Mining is not scheduled until 2026, but mine plans are constantly changing. —

Company	Project	Metal/Commodity	Location	Stage	2017 Drilling program
Skeena Resources	Snip	Gold	Golden Triangle	Exploration	15,000 meters
	Spectrum-GJ	Gold, Silver, Copper	Golden Triangle	Exploration, NI 43-101	
	Porter-Idaho	Silve, Lead, Zinc	Golden Triangle	Exploration	TBD
Nicola Mining	Thule Copper	Copper	South-Central B.C.	Exploration	
	Treasure Mountain	Silver	Southwest B.C.	Exploration	
Colorado Resources	KSP	Gold, Copper	Golden Triangle	Exploration	
	North ROK	Copper, Gold	Golden Triangle	Exploration	
First Point Minerals	Decar	Nickel	Central B.C.	Exploration, NI 43-101	2,000 meters
Brixton Metals	Atlin	Gold		Exploration	
	Thorn	Gold, Silver	Northwest B.C.	Exploration	
Carube Copper	Rogers Creek	Copper, Gold	Southwest B.C.	Exploration, NI 43-101	
Copper North	Carmacks	Copper, Gold, Silver	Yukon	Exploration, NI 43-101	TBD
	Redstone	Copper	Northwest Territories	Exploration	TBD
	Thor	Copper, Gold	Northern B.C.	Exploration	TBD
Serengeti Resources	Kwanika	Copper, Gold, Silver	Central B.C.	Exploration, Preliminary Economic Assessment, NI 43-101	
	UDS	Copper, Gold	Northern B.C.	Exploration	1,500-2,000 meters
	Milligan West	Copper, Gold	Central B.C.	Exploration	TBD
Seabridge Gold	KSM	Gold, Copper	Golden Triangle	Exploration, Pre-Feasibility Study	
	Courageous Lake	Gold	Northwest Territories	Exploration, Preliminary Economic Assessment, NI 43-101	
AuRico Metals	Kemess Underground	Gold, Copper	Northern B.C.	Exploration, Preliminary Economic Assessment, NI 43-101	
	Kemess East	Gold, Copper, Silver	Northern B.C.	Exploration, Preliminary Economic Assessment, NI 43-101	
Metallis	Kirkham	Gold, Copper	Golden Triangle	Exploration	TBD
HDI Amarc	IKE	Copper	South-Central B.C.	Exploration	TBD
Margaux Resources	Kootenay Arc	Lead-Zinc	South-Central B.C.	Exploration	4,500 m
	Bayonne	Gold	South-Central B.C.	Exploration	
	Jackpot	Lead-Zinc	South-Central B.C.	Exploration	
	Jersey-Emerald	Zinc, Tungsten, Gold	South-Central B.C.	Exploration	
	Sheep Creek	Gold	South-Central B.C.	Exploration	
Commander Resources	Olympic	Copper, Gold	Yukon	Exploration	
	Flume	Gold	Yukon	Exploration	
	Omineca	Copper, Gold, Molybdenum	Northern B.C.	Exploration	
	Mt. Polley	Copper, Gold	Central B.C.	Exploration	
	October Dome	Copper, Gold	Central B.C.	Exploration	
	Rebel Zinc	Zinc	Northeast B.C.	Exploration	
IDM Mining	Red Mountain	Gold, Silver	Golden Triangle	Feasibility Study	
Strategic Metals	Hopper Project	Copper, Gold	Yukon	Exploration	
	Midas Touch	Gold	Yukon	Exploration	
	Hartless Joe	Gold, Silver	Yukon	Exploration	
	Mint	Gold, Copper	Yukon	Exploration	
	Mount Hinton	Gold, Silver	Yukon	Exploration	
Eastfield Resources	Zymo	Copper, Gold	Northern B.C.	Exploration	
	Iron Lake	Copper, Cobalt, Gold	South-Central B.C.	Exploration	
	Indata	Copper, Gold, Nickel	Northern B.C.	Exploration	
	Naggie	Copper, Gold	Central B.C.	Exploration	
	Big Valley	Gold, Copper	Central B.C.	Exploration	
Klondike Silver	Slocan	Silver, Lead, Zinc	Southeast B.C.	Exploration	
Avino Silver and Gold Mines	Bralorne	Gold	Southwest B.C.	Exploration, NI 43-101	
	Eagle Property	Silver, Gold	Yukon	Exploration	

Company	Project	Metal/Commodity	Location	Stage	2017 Drilling program
Evrim Resources	Ball Creek	Copper, Gold, Silver, Mo	Golden Triangle	Exploration	
	Axe	Copper, Gold	Central B.C.	Exploration	
Ascot Resources	Premier/Dilworth	Gold, Silver	Golden Triangle	Exploration	120,000 m
OK2 Minerals	Pyramid	Copper, Gold	Northwest B.C.	Exploration	TBD
	Kinskuch	Copper, Gold	Golden Triangle	Exploration	TBD
Romios Gold Resources	Trek	Copper, Gold	Golden Triangle	Exploration	
	Newmont Lake	Gold, Silver, Copper	Golden Triangle	Exploration	
	JW	Copper, Gold	Golden Triangle	Exploration	
	Royce/Porc	Gold	Golden Triangle	Exploration	
White Gold Corp	390,000 hectares	Gold	White Gold District, Yukon	Exploration	6,000 m
American Manganese	Rocher Deboule	Gold, Silver, Copper	Northeast B.C.	Exploration	
	Lonnie Virgil	Niobium	Central B.C.	Exploration	
	Artillery Peak	Manganese	Central B.C.	Exploration, Pre-Feasibility Study, NI 43-101	
Golden Predator	3 Aces	Gold	Yukon	Exploration	40,000 m
	Brewery Creek	Gold	Yukon	Exploration, Preliminary Economic Assessment, NI 43-101	
Anthill Resources	Yellowhead	Copper	Central B.C.	Exploration	
	Hess	Gold, Silver	Yukon	Exploration	
	Einarson	Gold	Yukon	Exploration	
Colonial Coal	Flatbed	Coal	Northwest B.C.	Exploration	
	Huguenot	Coal	Northwest B.C.	Exploration	
Gold Reach Resources	Ootsa	Copper, Gold, Molybdenum	Northern B.C.	Exploration, NI 43-101	
Aben Resources	Forrest Kerr	Gold	Golden Triangle	Exploration	2,500 m
	Justin	Gold	Yukon	Exploration	
	Selwyn Recce	Gold	Northwest Territories	Exploration	
	Chico	Gold	Saskatchewan	Exploration	
Dolly Varden Silver Corp	Dolly Varden	Silver	Golden Triangle	Exploration, NI 43-101	
EnGold	Lac La Hache	Gold, Silver Copper	Central B.C.	Exploration	TBD
	Red JV	Gold, Silver Copper	Central B.C.	Exploration	
Westhaven Ventures	Prospect Valley	Gold	South-Central B.C.	Exploration	
	Shovelnose	Gold	South-Central B.C.	Exploration	
	Snooka Creek	Gold	South-Central B.C.	Exploration	
Rotation Minerals	Scottie Gold	Gold	Golden Triangle	Exploration	
	Four-J	Gold, Lead, Zinc	Golden Triangle	Exploration	
	Black Hills	Gold	Golden Triangle	Exploration	
Jaxon Minerals	Hazelton	Silver, Gold, Zinc	Northern B.C.	Exploration	
	Foremore/Wishbone	Gold	Golden Triangle	Exploration	
Goldstrike Resources	Plateau	Gold	Yukon	Exploration	TBD
	Lucky Strike	Gold	Yukon	Exploration	
	Summit	Gold	Yukon	Exploration	
Triumph Gold	Freegold Mountain	Gold, Silver	Yukon	Exploration, NI 43-101	13,000 m
	Tad/Toro	Gold	Yukon	Exploration	
	Severance	Gold, Copper	Yukon	Exploration	
North Isle Copper and Gold	North Island	Copper, Gold	Vancouver Island	Exploration, NI 43-101	
Finlay Minerals	Silver Hope	Copper, Silver, Gold	Central B.C.	Exploration	
	Atty	Copper, Gold	Northern B.C.	Exploration	
	Pil	Gold, Silver	Northern B.C.	Exploration	
Pacific Empire Minerals	Pinnacle Reef	Gold, Copper	Central B.C.	Exploration	TBD
ML Gold Corp	Pinnacle Reef	Gold, Copper	Central B.C.	Exploration	TBD
	Block 103	Magnetite	Quebec	Exploration, NI 43-101	

Image courtesy of Prophecy Platinum

YUKON MINING

"The advantage of operating in Yukon is that it has a great education and recreation system for families. However, we are going to have issues on shortages of skilled labor. Therefore the government and companies will have to enhance training through institutions like Yukon College. Mining companies have been very supportive on this front."

- Ron Light,
General Manager at Minto Mine,
Capstone Mining Corp

Yukon:
Where Mining Past and Present Meet

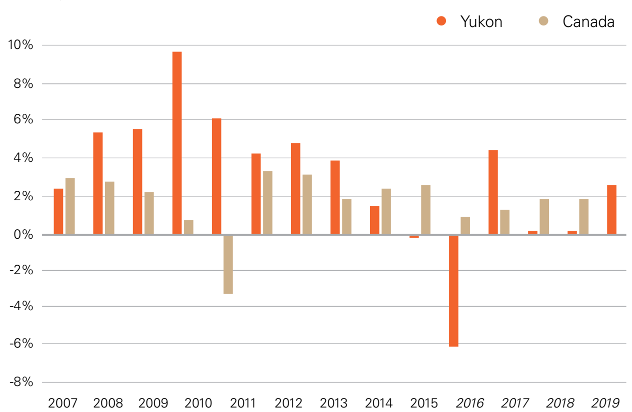
The vast and lonely territories of Yukon have long been known to contain riches. Now majors and juniors are using newly built roads and infrastructure to extract them.

For decades, Yukon has failed to live up to its mining potential. This territory, roughly as large as Spain, currently hosts only one major operating mine - Capstone's Minto copper mine. Despite its widely acknowledged mineral wealth, companies have been reluctant to invest heavily in Yukon as they focused on overseas acquisitions during the boom years and cited high operational costs in this territory during the downturn. Yukon can be a harsh territory to operate in given its vastly under-populated nature and the remoteness of some of its regions. Additionally, harsh winter conditions can make exploration activity possible only during the summer months, while water scarcity and lack of access to power can dent operations.

However, recent developments suggest that a paradigm change is in the works. Vancouver-based giant Goldcorp acquired Kaminak Gold in July 2016. Its Coffee Gold project is a high-grade,

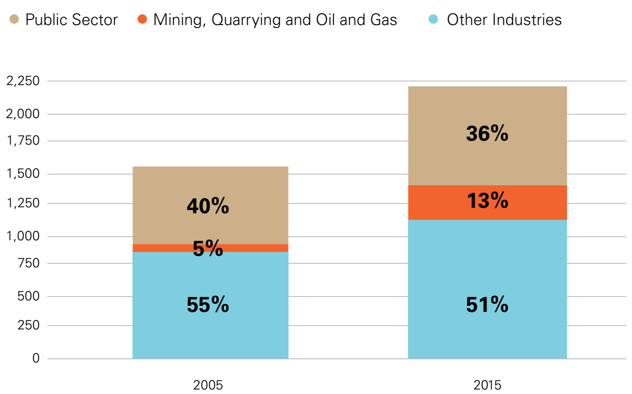
REAL GDP BY INDUSTRY - ANNUAL GROWTH RATE

Source: Department of Finance; Statistics Canada; IMF



REAL GDP BY INDUSTRY (2007 US$ millions)

Source: Department of Finance; Statistics Canada



YUKON AT A GLANCE

Source: IMF

Capital: Whitehorse
Population: 37,858 (2016)
Head of Government:
Premier Sandy Silver (Yukon Liberal Party)
GDP: $2.295 billion
GDP growth: 8.2% for 2016 (Statistics Canada)
Real GDP growth:
0.1% for 2017 (estimate)
0.2% for 2018 (estimate)
Unemployment rate: 4.5% (May 2017, Statistics Canada)
Value of mineral production: $409 million (2016)
Mining exploration expenditures: $87.9 million (2016)
Mining Development expenditures: $11.9 million (2016)
Contribution of Mining, Quarrying and Oil and Gas to GDP: 13% (2015)

heap leach project and Goldcorp is currently in the process of reviewing and optimizing Kaminak's feasibility study along with developing infrastructure. The feasibility study performed by Kaminak established a 10-year mine life based on a small portion on the overall land package. Therefore, Goldcorp believes reserves at Coffee to be much greater. The company will build a camp this year to sustain operations. Healthy community and government relations under Kaminak were among the main incentives for Goldcorp's $520 million acquisition of the Vancouver-based junior miner back in July 2016. Brent Bergeron, executive vice-president of corporate affairs and sustainability at Goldcorp explains: "The reserves and prospectivity were very attractive, but more importantly, the management of Kaminak had done a great job in terms of reaching out to the communities and the authorities, building relationships and addressing any concerns about the project from the beginning…the project is being extremely well-received, because people had been waiting for one of the major companies to come back to Yukon."

Goldcorp's commitment to the Yukon has been proved further by the company's decision to acquire a 19.9% stake in Triumph Gold during the first quarter of 2017. Triumph Gold is actively exploring its Freegold Mountain project, undertaking a 13,000-meter drill program this year. The project is located in the Dawson Range, in proximity to the Coffee Gold project. Elaborating on the details of the Goldcorp deal, Paul Reynolds, president and CEO at Triumph Gold states: "We had been in talks with Goldcorp since mid last year. Toward the end of 2016, things started to materialize as the market showed notable improvements and Goldcorp reiterated its commitment to the Yukon…With the deal, we still have 100% ownership in all of our properties but we have a big shareholder in Goldcorp and we have access to their technical team. I see it as a win-win for both of us."

Another major with an established presence in Yukon is Kinross Gold which, like Agnico Eagle, acquired a strategic share of 19.9% of White Gold Corp. This newborn company owns roughly 40% of the prolific White Gold district, with an estimated 1 million oz. in gold reserves.

More recently, Newmont announced an agreement to explore and develop Goldstrike Resources' Plateau property, while Barrick announced an agreement with Atac resources to acquire up to 70% of its Orion project. This stampede of investments has raised prospects for the mining industry in Yukon, which may ultimately deliver the economic opportunities and development that the territory needs.

The White Gold District, located south of the historic mining town of Dawson, has experienced notable interest from prospectors and majors alike. Therefore, it was no surprise when Agnico Eagle and Kinross decided to take a stake in White Gold Corp., a newly created company with a talented exploration team led by the renowned prospector Shawn Ryan, credited for the discovery of Golden Saddle. White Gold Corp. holds the largest land pack-

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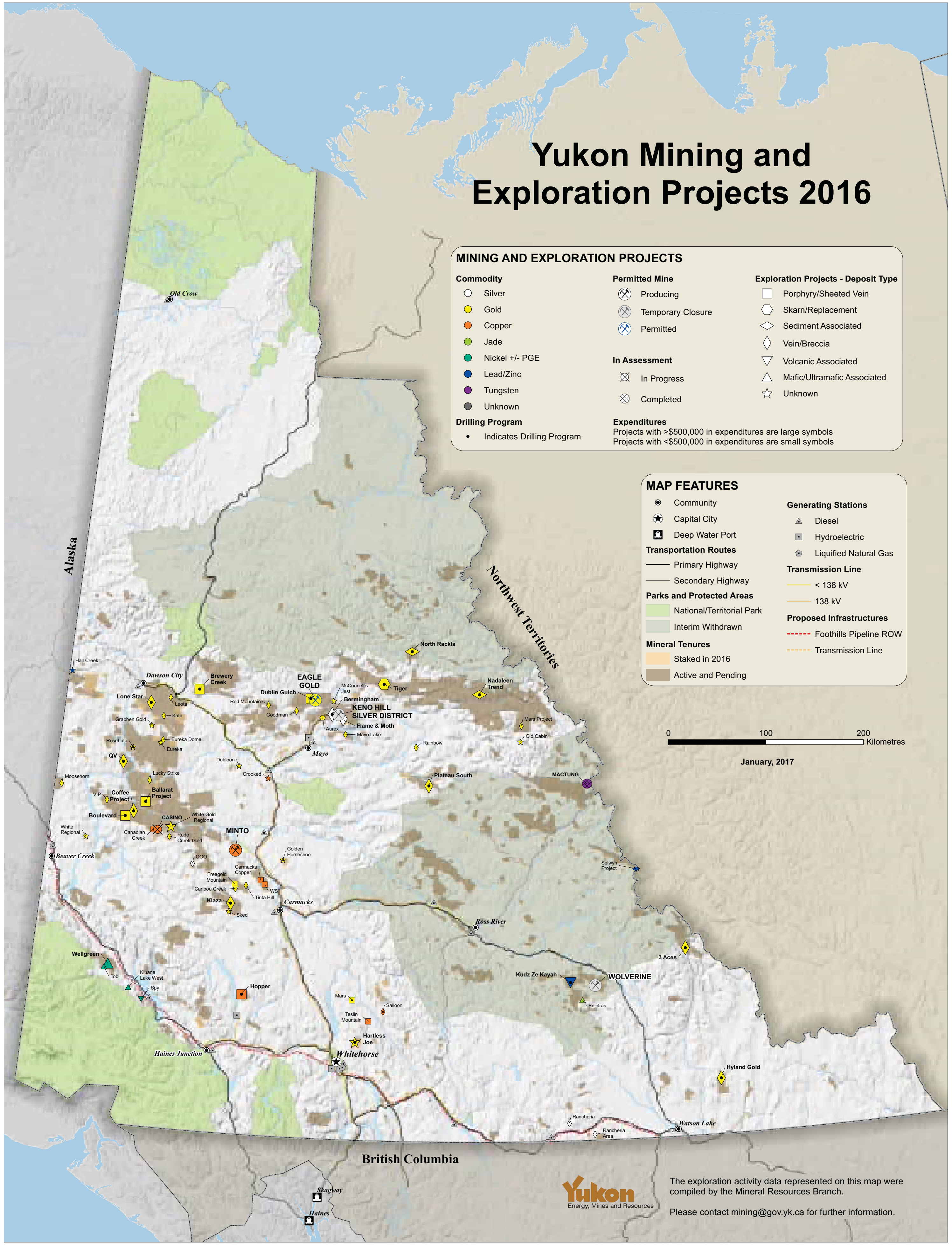
"I am a huge believer in the White Gold district and the Yukon as a whole. I think there will be more discoveries and that will attract more companies and interest to the area. Very little exploration has been done in the Yukon to date, I believe this is the opportunity."

- David Schmidt,
CFO,
White Gold Corp



David Schmidt & Shawn Ryan

DS: CFO
SR: Chief Technical Advisor
WHITE GOLD CORP (TSX-V: WGO)

DS

SR

From White Gold's perspective, why is Yukon increasingly attractive for mining companies?

DS: White Gold Corp is a public company based in Toronto, Canada that owns a portfolio of quartz claims covering 390,000 hectares in the Yukon's White Gold District. The company's shares trade on the TSX Venture Exchange in Canada under the ticker symbol WGO.

The Yukon is extremely underexplored. The fact that large mineral systems have already been proved in some areas but little or no work has been done attests to this. To me, it is completely wide open; the government is very friendly and willing to help, with both the federal and territorial governments making significant infrastructure investment in the region. There have been a number of high-profile discoveries in the White Gold District in recent years, including the Golden Saddle and Coffee Deposits, totaling over 7M oz of gold in the White Gold District, each of which were discovered by our Chief Technical Advisor, Shawn Ryan, who joins me today. We are the largest land holder in the White Gold District, owning approximately 40% of the claims and have assembled a team that has been directly involved in every major discovery in the district.

Can you provide an overview of your property portfolio?

DS: Our 30 properties range from early stage, to advanced drill targets, to properties with historic resources. Our original portfolio consisted of mostly grassroots projects that we acquired from Shawn, and this year we have expanded our portfolio with the acquisition of Kinross' Yukon portfolio, which included the Golden Saddle and Arc deposits that have historic resources ranging from 1M to 1.5M oz of gold, with opportunity for significant expansion we believe. This built a diverse portfolio with both resource expansion potential and exploration upside.

Can you elaborate on the company's exploration program for this year?

SR: We have a budget of $15 million to drill 200 holes a year over the next three years. We plan to re-evaluate the entire district and not to focus on one specific property. If we find something substantial we will return with a new program. The business plan of systematically evaluating every project is what attracted Agnico Eagle to join us as a 19.9% partner. There should be at least one deposit but there is a high probability of two or three deposits, based on our research and the data we have compiled in the district.

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age in the district and has ambitious plans for the future: "We have a budget of $15 million to drill 200 holes a year over the next three years. We plan to re-evaluate the entire district and not to focus on one specific property. If we find something substantial we will return with a new program. The business plan of systematically evaluating every project is what attracted Agnico Eagle to join us as a 19.9% partner. There should be at least one deposit but there is a high probability of two or three deposits, based on our research and the data we have compiled in the district," stated Shawn Ryan, chief technical advisor at White Gold Corp.

David Schmidt, CFO at White Gold Corp. is also bullish on the district's and the Yukon's prospects, citing immense potential: "I am a huge believer in the White Gold district and the Yukon as a whole. I think there will be more discoveries and that will attract more companies and interest to the area. Very little exploration has been done in the Yukon to date, I believe this is the opportunity."

Denver-based Newmont announced its entry to Yukon with the announcement of a $53 million dollar deal with Goldstrike Resources. Goldstrike has developed the Plateau project since 2010 with encouraging results after every drilling program over the years. This resulted in the Cordilleran Round Up and PDAC inviting Goldstrike to display its drilling highlights in their core shack in 2016, including an intersection of 13.25 g/mt gold over 17.5 m and 35.28 g/mt over 5.7 m true width. Interest soon followed and the deal with Newmont was finalized in March, thereby altering Goldstrike's plans for the property: "We plan to go into the field this summer with the largest exploration campaign in our history, comprising systematic exploration and drilling, and significantly ramping up the Plateau project… This agreement further demonstrates their [Newmont's] level of commitment to the Yukon and shows that Newmont recognized the unique opportunity to control an entire new district-scale gold system under one umbrella. They have an excellent global reputation, district scale ability, experience and ,of course, the funding required to explore and develop something of this scale and magnitude. Newmont has all the attributes needed for proving up economic reserves right through to development and production," declared William Chornobay, chief operating officer at Goldstrike Resources.

However, majors will not be the only drivers of exploration activity. Golden Predator will continue to carry out a major drilling program at its 3 Aces property this year. The company has achieved an impressive turnaround over the last year, reaching a market capitalization of over $120 million and increasing its land position from 250 to 375 square km. In order to achieve this, Golden Predator performed a bulk sample at the Ace of Spades zone of 750 mt last year. Using gravity feed the company was able to produce an 88 oz gold bar, using 10% of the sample. This subsequently attracted investors, namely Eric Sprott, McEwen Mining and Power One. Golden Predator has also enjoyed great cooperation from the Yukon government and the Kaska Nation to take the project forward, thereby facilitating the development of necessary infrastructure to carry out exploration work.

Victoria Gold will devote further exploration funds at Olive-Shamrock, while simultaneously preparing for construction at its Eagle Gold project. "We acquired

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John McConnell

President and CEO
VICTORIA GOLD CORPORATION

"I think that getting Eagle into production and Goldcorp's acquisition of the Coffee project has brought new focus on the Yukon. The good news is that the production phase can be year-round. I foresee a significant movement of companies from other Canadian mining jurisdictions to Yukon in the near future."

What have been the major developments for Victoria Gold over the past year?

2016 was a transformational year for Victoria. We received our final permit for the Eagle Gold Project in late 2015, so we were able to speak to the advancement of Eagle being a fully permitted project throughout 2016. In September 2016, we issued an updated feasibility study that has very good results, so we started to gain more attention. It is rare to come by a fully permitted project, with extremely good economics that is based in as safe a jurisdiction as Yukon. In 2016, we conducted a $5 million exploration program, which, due to market conditions, was the first time in three years that we had done any exploration. In May 2016, for the first time since 2011, we did a financing which brought in strategic investors: Tom Kaplan's Electrum Group invested $16 million in Victoria Gold, and Sun Valley Gold invested $8 million. Tom Kaplan is recognized by many as a very savvy investor. These investments along with our exploration results and feasibility study, helped to take our market cap from $40 million to more than $300 million. We have also recently reached an agreement with BNP Paribas to arrange a US$220 million debt facility. The project's capital costs amount to US$300 million and we have US$40 million in our treasury. This leaves a funding gap. We are looking at various alternatives to fill this gap; it could be through equity, royalty or another strategic investor. We hope to finalize the debt this spring and provided that we secure the additional funds we can start construction this year. The time frame for construction is short so that will enable us to be in production in 2019.

What are your expectations on the price of gold for the project to be successful?

For the feasibility study we used gold at $1250. The project break-even is less than $900. You never build a project just to breakeven but considering that our cash costs are less than $650 per ounce, it leaves us with a big margin at current prices.

What are the particularities of operating in the Yukon and what are your prospects for this region?

Yukon is very much under-explored. The challenge with exploration in Yukon is that it's only possible for four or five months of the year. This means it takes triple the amount of time to do the same amount of exploration than it would take in a warmer climate, such as southern Ontario. I think that getting Eagle into production and Goldcorp's acquisition of the Coffee project has brought new focus on the Yukon. The good news is that the production phase can be year-round. I foresee a significant movement of companies from other Canadian mining jurisdictions to Yukon in the near future. When we first went to Yukon in 2009, there were about 20 companies exploring. By 2011, there were probably about 150 companies exploring, and by 2015, there were about ten companies exploring. I anticipate that in 2017, that number being around 50 or 60.

Have you encountered any hurdles in the First Nations negotiation process?

First Nations relations is work, you have to keep at it and it's a real team effort. We have a person on our team that has been dealing with the First Nation of Na-Cho Nyak Dun for more than 20 years, and knows everyone in the community. We have engaged with the First Nation and as a result, we were able to sign a full benefits agreement in 2011. I believe it is a good agreement because it has survived three elections. We respect that we operate within their traditional territory. Our intent is to mine the gold and to ensure that we return the land as close as possible to how we found it in the beginning, while providing sustainable benefit to the community.

Image courtesy of Shutterstock

Clynton R. Nauman

President and CEO
ALEXCO

"The highlights are primarily eight years of mine life, averaging grades of 843 grams per ton silver. This will clearly be one of the best in class silver operations in the world, producing an average of 3.5 million ounces of silver over that 8 year period."

What have been the major developments over the past year for Alexco?
It has been a busy year for Alexco. We have consolidated our silver resources in the Keno Hill Silver District. We have published updates to those resources, one of them being a fairly large silver resource while the others are smaller but with very high grades. We used all of that information to produce an updated preliminary economic assessment and we published a new mine plan.

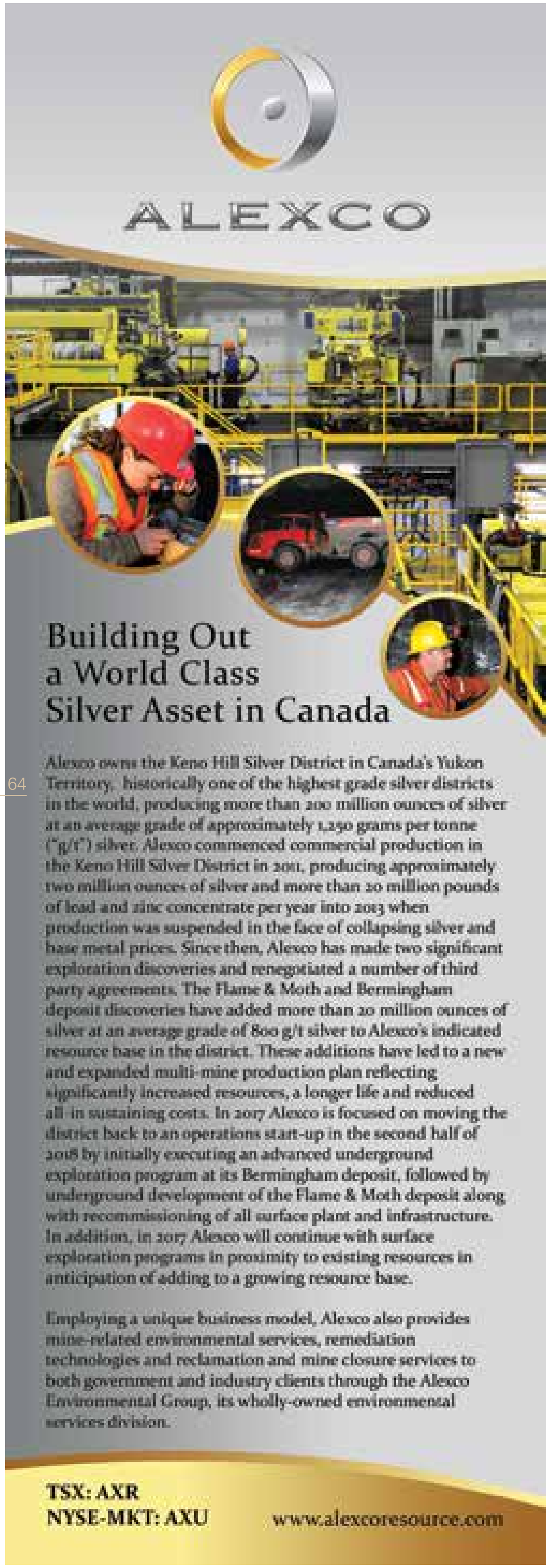
What are the highlights of the PEA?
The highlights are primarily eight years of mine life, averaging grades of 843 grams per ton silver. This will clearly be one of the best in class silver operations in the world, producing an average of 3.5 million ounces of silver over that 8 year period and more than 4 million oz. a year in the first 3 years. All in sustaining costs are around $13.5 for the entire production period and close to $12 in the first two to three years. We are pretty excited and we are going to systematically move forward and advance the project towards production.

What deposits will see the most activity?
The plan would be to mine 400 tonnes a day and the entire production period will be underpinned by about 260 to 270 tonnes a day from the Flame and Moth deposit. Overall, we are talking about more than 1.6 million tonnes at 498 g/ton indicated resource at F&M. This translates to 650,000 to 700,000 tonnes of potentially mineable material at 666 g/t. Moreover, these figures will be supplemented with production from Bermingham for the first six years, at 130 to 140 tons a day. That diluted material arrives to the mill at about 1.2 kg/tonne silver. Production from Lucky Queen at a similar +1.0 kg/t silver will follow toward the end of the mine life. There are a lot more tonnes available, this just happens to be what we put in the 8-year plan. Without doubt, in my view, it is one of the best silver opportunities in the world.

What were the reasons behind the amended silver purchase agreement with Silver Wheaton?
At the end of the day, we wouldn't be here without Silver Wheaton. They originally contributed $US50 million to help us put this district into production. It just happens that the formula we set out in 2008 does not meet the requirements of today's mining configuration. We are re-negotiating this agreement so instead of Silver Wheaton paying $3.90 an ounce for the 25% silver stream that Silver Wheaton receives from Keno Hill, that payment will be variable on the basis of monthly silver price and silver grade for material processed through our mill. It is a very innovative mechanism and it has a floor and ceiling to calculate the production payment on a monthly basis. I will be very interested to see what the reaction is in the industry because it has a lot of advantages in terms of efficiency at the mining level for Alexco, and it ensures that we will continue to operate at low points of the pricing cycle. It is good deal for both companies and that was quite an achievement.

How is the state of infrastructure surrounding Keno Hill?
Infrastructure is an issue for the industry as there are huge but stranded opportunities in the Yukon. Keno Hill is blessed with being on the road system and along the power grid. Our most important issue is that our power grid needs to be upgraded. It is an old grid and not as reliable as it should be. We produce concentrates and truck them some 500km to Skagway, which is a deep-water port in Alaska. We rely on that infrastructure and we will be supportive to any development.

How would you describe the Yukon government's efforts to boost mining?
You now have major players entering the Yukon and there will be others. This has happened, in my view, because of the effort that the government has put in in the last 4 to 5 years. The Yukon government is very active in marketing the Yukon as a friendly place for investment. There are going to be more major discoveries in the Yukon, there is no question about that. Moreover, the safety of the jurisdiction is going to become more and more important for mining companies. From the Alexco perspective, we have world-class silver deposits in a jurisdiction where our assets are 100% safe.



"We have an initiative called Towards Zero Water or H2zero, that we call our 'moonshot'. We are looking at ways to drastically reduce the amount of water that is contained in the entire process at a mine site, lower our overall footprint and move towards having a self-contained operation that only puts water into it once and then continually reuses and recycles it.

- Brent Bergeron,
executive VP,
Corporate Affairs and Sustainability,
Goldcorp"

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the Dublin Gulch property in 2009 and since then, have devoted most of our efforts on developing Eagle. Only in the last couple of years we have looked at the wider regional potential. We have now identified through geochemistry and geophysics about 15 km of mineralized trend with numerous targets. Two years ago we focused on an area called Olive-Shamrock, which now has a reserve of which some is included in the feasibility study. This year we will spend a further $6 million on exploration: $3 million at Olive-Shamrock and an additional $3 million doing preliminary exploration work at additional targets we have identified," declared John McConnell, president and CEO at Victoria Gold.
Victoria has attracted interest from renowned investors the likes of Tom Kaplan's Electrum Group and Sun Valley Gold, which together invested $24 million in what will be Yukon's next operating mine. The past year was a transformational period for Victoria Gold, with major favorable developments unfolding that will lead to the completion of Eagle. Speaking about the company's results over the past 12 months, McConnell adds: "These investments, along with our exploration results and feasibility study helped to take our market cap from $40 million to more than $300 million. We have also recently reached an agreement with BNP Paribas to arrange a $220 million debt facility…the time frame for construction is short so that will enable us to be in production in 2018."
Alexco is another well-established player in Yukon that has had a very eventful year. In 2016, the company consolidated its silver resources in the Keno Silver District, having published updates to its resources to produce an updated preliminary economic assessment and mine plan. Among the highlights are eight years of mine life, averaging grades of 443 g/mt silver, which will be one of the best in class silver operations in the world, producing an average of 3.5 million oz. silver over that 8 year period. Speaking about the company's prospects, Clynton Nauman, president and CEO at Alexco, noted: " I like to think that Alexco is the leading candidate for exploration success in the Yukon. We are solid, systematic explorers and we have been rewarded with the discovery of

Brent Bergeron

Executive VP,
Corporate Affairs
and Sustainability
GOLDCORP

What was the rationale behind the Coffee acquisition?

Canada is a great place for us to continue investing our money, because there are rich resources and we work very closely with the government through the Mining Association. We already have 22 agreements with First Nations around the country, which has helped build the long-term partnerships to operate our projects. The Yukon government had made significant efforts to be in touch with us. The Kaminak Coffee project was a very interesting project: it is a conventional heap leach operation, which is not technically complicated. The reserves and prospectivity were very attractive, but more importantly, the management of Kaminak had done a great job in terms of reaching out to the communities and the authorities, building relationships and addressing any concerns about the project from the beginning.

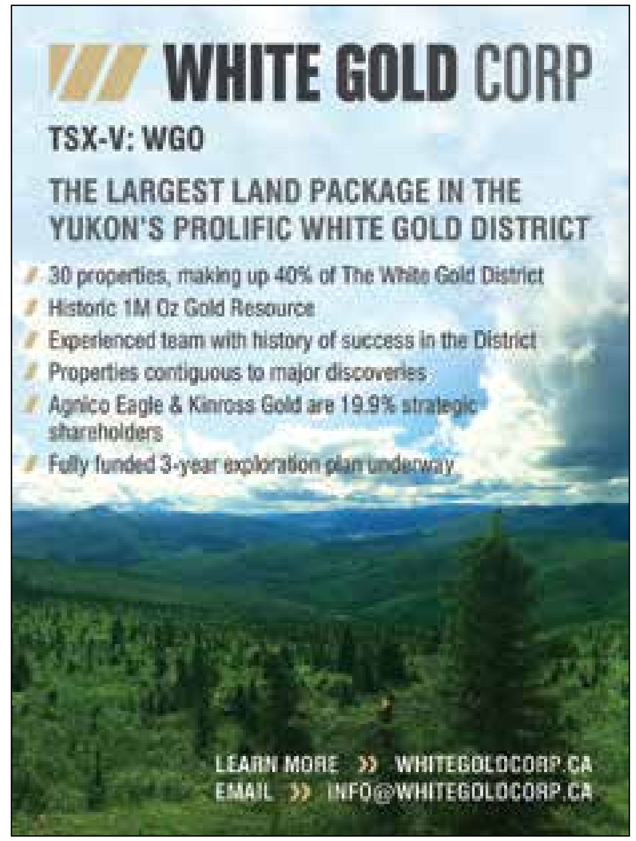
How did the local population receive Goldcorp's arrival to the Yukon?

The project is being extremely well received, because people had been waiting for one of the major companies to come back to the Yukon. One of the big concerns people have is how quickly all of these projects are going to move forward. This overall economic boom is not going to happen in a very short period of time. It's a process. Part of our plan working with them is to help with their economic development plan, to see if we can be a catalyst and ensure the social and economic benefits of our operation reach the next generation as well.

How important is it to promote economic development beyond Coffee's estimated 10-year mine life?

The feasibility study done by Kaminak established a 10-year mine life for Coffee; that just took into account a very small portion of the overall land package they had. We believe there is a lot more potential. We have also been very clear that we are not going to the Yukon just for the Coffee project. We are going to the Yukon to build a camp, which includes other properties in the area, and this way we should extend our presence in that jurisdiction for more than ten years. Also, we do not want to be the only company that operates in the area. Once our operation is completed, the capacity that it is going to be built should be used by other operations in the Yukon.

the Flame and Moth and Bermingham deposits in the recent past. In fact, our exploration team has added about 23 million oz. to our indicated resource base at 800 g/mt silver in the last three years with discovery costs hovering around 50 to 55 cents per oz."
Project generators are certain about Yukon's golden future and have consolidated strong property portfolios during the downturn, foreseeing the arrival of majors and juniors over the coming years. Such is the case of Strategic Metals, a project generator company with one of the most diversified asset portfolios in this territory. "Strategic Metals has acquired over 100 projects in the Yukon as well as a few in British Columbia and the Northwest Territories. Our properties are particularly attractive because we own 100% of them and have no underlying NSRs. While we ultimately aim to sell our projects before the drilling phase, we do have the permitting in place to drill up to 3,000 holes or 500,000 m if we see the value in taking our projects further than initially intended. The longer we stayed in the Yukon during the downturn, the more we saw favorable projects opening up. We have begun to feel an uptick in 2017 and we have had a lot of interest in our properties, but we are waiting for the upswing to mature to get more value. Once we make a sale, there will be a domino effect. Success breeds success," declared Douglas Eaton, president and CEO at Strategic Metals.
With attention shifting north, B.C.-based juniors are starting to reassess opportunities and re-start projects in Yukon. A case in point is Aben Resources, a Vancouver-based junior eager to kick-start exploration at its Justin property. "I was not planning to perform a lot of work on Justin but this has changed since there is renewed



Global Business Reports

Image courtesy of Commander Resources

interest in Yukon and Justin is a great property. We drilled 12 holes and hit in 10 of them. We plan on doing geochemical and geophysics work and put it all together," declared Jim Pettit, president and CEO at Aben.

Yukon possesses noteworthy competitive advantages. Landholding costs amount to only $100 per claim annually, making the territory attractive for project generators and prospectors. First Nations disputes, a frequent source of concern for investors in neighboring British Columbia, are rare in Yukon. On the infrastructure front, both the federal and Yukon government have made emphasis on the construction of highways and roads across the territory, devoting roughly 27% of all infrastructure investments to these types of projects and enhancing Yukon's connectivity. These strengths, together with high-grade gold deposits scattered over tens of thousands of square kilometers, will continue to play to Yukon's advantage opening a new chapter in the territory's history that should be closely followed. —

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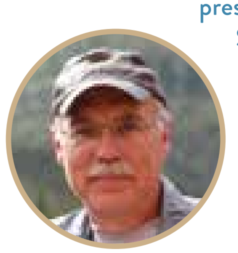
Strategic Metals has acquired over 100 projects in the Yukon. Our properties are particularly attractive because we own 100% of them and have no underlying NSRs. While we ultimately aim to sell our projects before the drilling phase, we do have the permitting in place to drill up to 3,000 holes or 500,000 m if we see the value in taking our projects further.

- Douglas Eaton,
president and CEO,
Strategic Metals



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"We are working with GroundTruth for the drilling program and we are using a new technique, which is fast, cost-effective and environmentally friendly. What used to take three field seasons now takes around a month, so this $15 million dollar budget is, in reality, more like a $60 million budget. The new technique answers questions far quicker, sometimes too quick for many juniors."

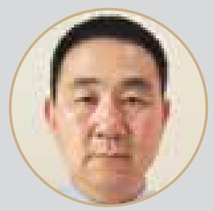
- Shawn Ryan,
chief technical advisor,
White Gold Corp.

"The Yukon is a great place to do business and its untapped mineral potential is becoming very apparent. Large companies are looking for a place where there is still near surface high-grade gold to be found in a politically stable environment."

- William Chornobay,
COO,
Goldstrike Resources

"In 2017, we are running a $4 million exploration program, of which $3.5 million will be devoted for diamond drilling. We have significant resources already but we are looking to expand existing resources and develop surrounding areas. Exploration drilling totaling 12,000 metres will be focused in three zones: Generation zone, with 3,000 meters, and the rest will be split between Revenue and Nucleus."

- Paul Reynolds,
president and CEO,
Triumph Gold



"A few years ago, Chinese companies focused primarily on the energy sector, but there has been a shift in focus toward copper and gold. China has a high demand for ore concentrates that can be transported back to China for smelting, so within the next five years, Chinese companies will likely increase their investment in Western Canada."

- Wanjin Yang,
chief geologist,
Anthill Resources

Image courtesy of Katie Bromley

VANCOUVER, NORTH AMERICA'S EXPLORATION CAPITAL

"There is a large talent pool in Vancouver, which benefits from the crossover between the tech sector and the mining industry. In Vancouver we have a phenomenal opportunity for those two sectors to work closely together and the entrepreneurial nature of the city makes it a very dynamic mining hub."

- Philippa Wilshaw,
partner, GVA Mining Industry Leader,
KMPG Canada

Image courtesy of Katie Bromley

Vancouver: North America's Exploration Hub

At first glance, Vancouver is one of the world's most aesthetic cities, surrounded by snow-capped mountains and with a unique geography featuring peninsulas and islands surrounded by the cold waters of the Pacific Ocean. Besides its remarkable natural beauty, this booming city houses the largest concentration of mineral exploration companies in the region and in fact, the world, with Vancouver-based companies hosting the largest share of mineral exploration projects in North America. It is commonly said that whenever activity picks up along downtown Vancouver's tree-lined avenues, mining projects worldwide soon follow. Of the 976 mining companies listed in the TSX Venture exchange, mostly comprising juniors, over 60% are headquartered in British Columbia, with the vast majority based in Vancouver.

Canada has for decades been at the forefront of the global mining industry, with its companies present in virtually every mining jurisdiction across the globe. Two major Canadian cities, Toronto and Vancouver, stand out as global mining hubs by financial institutions, major consultancies and multinational law firms. Of these, Toronto serves as the leading financial hub, home to the TSX and TSX Ventures markets, and hosting majors such as Barrick, IAMGOLD, and Kinross. Meanwhile, the vast majority of Canadian juniors have made Vancouver their home. Easy access to the Toronto markets, a favorable business environment, and a strong entrepreneurial and international community have turned this metropolis of roughly 2.5 million inhabitants into the world's mineral exploration epicenter. Moreover, the city's high quality of life, often ranking in the top three among world cities in Mercer's Quality of Living Ranking and the Economist Intelligence Unit's Global Livability Ranking, make Vancouver an extremely appealing destination for global investors.

Although Vancouver remains the world's mining barometer, the city's preeminence is particularly striking in regards to its companies' presence in North America, with major projects sprawling from the western edge of Alaska to the deep tropical forests of southern Mexico. From graphite in Alaska to gold in Nevada, or silver in Mexico, Vancouver-based companies possess the most comprehensive portfolio of projects and operating mines in the continent.

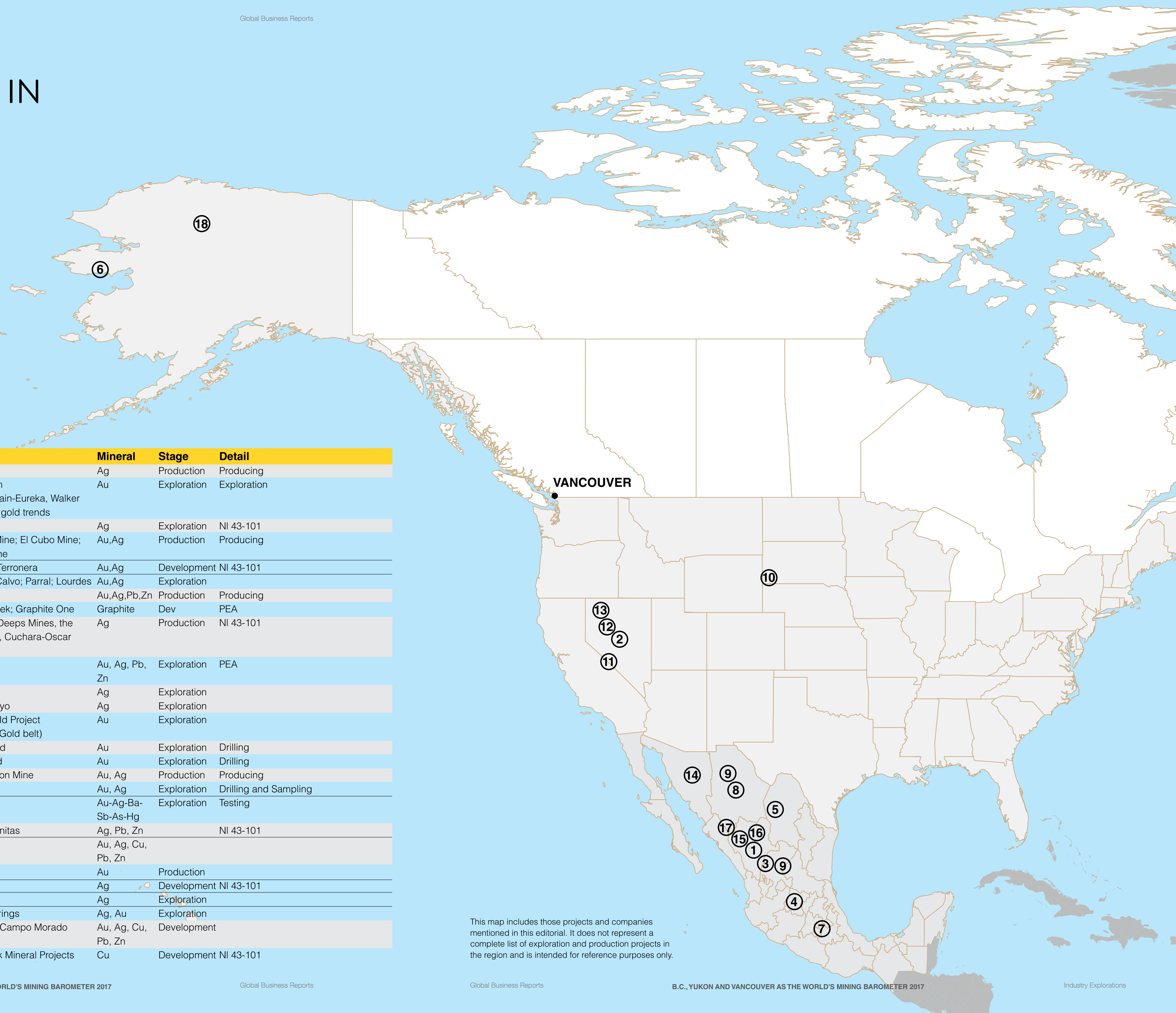
Vancouver's close-knitted mining community, much smaller than Toronto's, has proved largely beneficial for juniors, facilitating inter-company interactions, acquisitions and overall dynamism. Speaking about the city's strengths, Michael D. Scott, director of global investment banking at RBC Capital Markets notes: "Vancouver has historically been a very supportive jurisdiction for junior mining companies. There are high net worth individuals in Vancouver that understand the mining space very well and that is often important to get these discoveries and companies off the ground. Importantly, in Vancouver, there is a great deal of overlap and familiarity within the professional community, and this tends to be highly productive to get things accomplished. Vancouver remains very much a mining-centric town, at least from a public markets perspective."

Nonetheless, natural beauty and access to capital markets do not suffice to retain the spot of North America's exploration hub at a time when major cities compete fiercely to attract investments and know-how. Therefore, major mining clusters have been developed in Vancouver to enhance the city's competitiveness, with major universities, government and the private sector getting on board. "There is a large talent pool in Vancouver, which benefits from the crossover between the tech sector and the mining industry. In Vancouver, we have a phenomenal opportunity for those two sectors to work closely together and the entrepreneurial nature of the city makes it a very dynamic hub," explains Philippa Wilshaw, partner, GVA mining industry leader at KPMG Canada.

With innovation clusters, a strong financial community and the city's entrepreneurial nature, Vancouver will undoubtedly remain one of the major mining hubs for years to come and its position as North America's exploration hub seems unrivalled as its companies are once again eager on investing closer to home.

HIGHLIGHT PROJECTS IN **USA AND MEXICO**

	Company	Ticker	Project	Mineral	Stage	Detail
1	Avino Silver and Gold Mines	TSX-V, NYSE/MKT: ASM	Avino Mines	Ag	Production	Producing
2	Bravada Gold Corporation	TSX-V: BVA	12 projects in Battle-Mountain-Eureka, Walker Lane, Austin gold trends	Au	Exploration	Exploration
3	Defiance Silver	TSX-V:DEF | OTC: DNCVF	San Antonio	Ag	Exploration	NI 43-101
4	Endeavour Silver	TSX:EDR; NYSE:EXK	Guanaceví Mine; El Cubo Mine; Bolañitos Mine	Au,Ag	Production	Producing
			El Compas; Terronera	Au,Ag	Development	NI 43-101
			Guadalupe Calvo; Parral; Lourdes	Au,Ag	Exploration	
5	Goldcorp	TSX:G; NYSE: GG	Peñasquito	Au,Ag,Pb,Zn	Production	Producing
6	Graphite One	TSX-V: GPH; OTCQB: GPHOF	Graphite Creek; Graphite One	Graphite	Dev	PEA
7	Impact Silver	TSX-V:IPT | DAX:IKL	San Roman Deeps Mines, the Mirasol Mine, Cuchara-Oscar Mine	Ag	Production	NI 43-101
8	Levon Resources	TSX:LVN	Cordero	Au, Ag, Pb, Zn	Exploration	PEA
9	MAG Silver	TSX, NYSE A: MAG	Juanicipio	Ag	Exploration	
			Cinco de Mayo	Ag	Exploration	
10	Mineral Mountain	TSX-V: MMV	Rochford Gold Project (Homestake Gold belt)	Au	Exploration	
11	ML Gold Corp	TSX-V: MLG; FSE: XOVN	Palmetto Gold	Au	Exploration	Drilling
12	Newrange Gold	TSX-V: NRG	Pamlico Gold	Au	Exploration	Drilling
13	Rye Patch Gold	TSX-V: RPM; OTCQX: RPMGF	Florida Canyon Mine	Au, Ag	Production	Producing
14	SilverCrest Metals	TSX-V: SIL.V	Las Chispas	Au, Ag	Exploration	Drilling and Sampling
			Huasabas	Au-Ag-Ba-Sb-As-Hg	Exploration	Testing
15	Southern Silver	TSX-V: SSV	Cerro Las Minitas	Ag, Pb, Zn		NI 43-101
			Oro	Au, Ag, Cu, Pb, Zn		
16	SSR Mining	TSX: SSR	Marigold	Au	Production	
			Pitarrilla	Ag	Development	NI 43-101
			Candelaria	Ag	Exploration	
			Maverick Springs	Ag, Au	Exploration	
17	Telson Resources	TSX-V. TSN; OTCBB: SOHFF	Tahuehueto; Campo Morado	Au, Ag, Cu, Pb, Zn	Development	
18	Trilogy Metals	TSX, NYSE-MKT: TMQ	Upper Kobuk Mineral Projects	Cu	Development	NI 43-101



This map includes those projects and companies mentioned in this editorial. It does not represent a complete list of exploration and production projects in the region and is intended for reference purposes only.

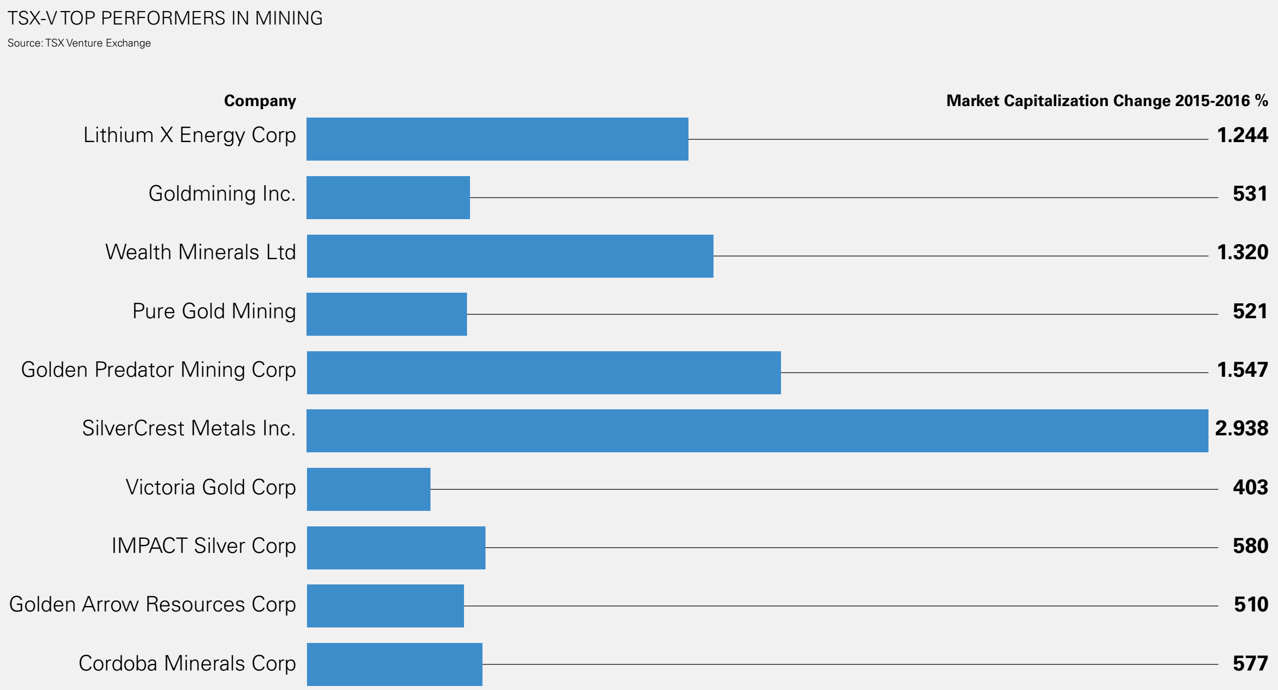
Philippa Wilshaw

Partner, GVA Mining Industry Leader
KPMG IN CANADA

How does Vancouver complement KPMG's global presence for clients in the mining industry?
We look at the mining industry from a global perspective and we serve our clients with their global strategies in mind. We focus on the services that are meaningful to our clients across the world and we tailor them to the local context. We have 14 global mining centres of excellence, including in traditional mining centres such as Denver, Toronto, Johannesburg and Perth. More recently we have added Singapore and Beijing, recognizing the important flows of capital from these centres, although not necessarily being mining jurisdictions per se. We are able to leverage our network to deliver the best service to our clients, whether on a local or global scale, ensuring that our clients have access to global teams with knowledge of their business and expertise. Vancouver is an amazing city in terms of the concentration of mining companies. Moreover, the city is very entrepreneurial and a lot of capital is raised here. Our Vancouver-based clients have operations across the globe and KPMG is able to serve them wherever they operate.

How would you describe mining activity in British Columbia and Yukon?
I would say that the industry has had difficulties over the past years and activity has been slow, due to a period of lower commodity prices and lower levels of investment. Most of the larger mining companies have worked their way through from an efficiency perspective and have gotten used to the environment they are now operating in. Where the industry has been particularly challenging is for smaller companies, as they have been unable to raise exploration capital. This will have an impact on the growth of the industry. Notwithstanding this, I also believe that necessity becomes the mother of all invention and companies that have strong projects and management teams will be successful in the longer term. Moreover, we have definitely seen more activity over the past six months and we hear of higher confidence levels in the capital markets for 2017 and 2018. These developments raise hopes for improved activity in B.C. and Yukon, which already have an established mining tradition and skilled workforces. Optimism seems higher than it has been over the past few years and mining is a very resilient industry.

What are KPMG's main competitive advantages?
KPMG is able to distinguish itself from the competition by our global footprint and the ability to bring that global expertise and tailor it to meet the needs of our local clients. Wherever our clients are going we can accompany them because we have the same standards, systems and quality in our services worldwide. We are the biggest accounting firm in British Columbia, which means we our clients benefit from more breadth and expertise. Ultimately, our clients tell us that it is all about the relationships that we have with them and that we really understand their business. I think this differentiates us.



Jason Neal

Global Co-Head of Mining
and Metals Group
BMO CAPITAL MARKETS

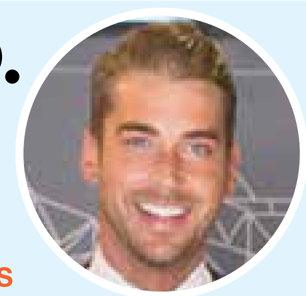
How did BMO's role as a financial advisor change through the global mining downturn?
Mining is a cyclical business and commodity prices have been very volatile, so the main focus over the past few years has been balance sheet management. At the onset of the downturn, there was quite a bit of leverage added to balance sheets through acquisitions for cash, and investors were looking for balance sheets to be deployed rather than shares being issued. As a result, companies built up more debt. At the same time, there was cost inflation on the operations side of the business, and cash flow from operations was not generated as expected. In 2015 and 2016, there were opportunities to acquire assets that would typically not be sold, but were divested as part of deleveraging. BMO advised companies buying and selling these assets, or we were involved in financing companies that were acquiring these assets.

What are the benefits of an early-stage IPO or RTO versus private equity funding?
There are far fewer assets that are in the hands of private equity, but when private equity is involved, the asset is typically at a later-stage. Private equity companies are more likely to put up the money to invest in development when a resource is already established and risk is lower rather than fund exploration. Early-stage exploration projects are almost always funded by public equity and are funded often by flow-through share tax credits. Traditional private equity firms have not invested heavily in mining in part because there are many moving underlying price assumptions on both revenue and cost line. Hedging the revenue is one thing, but it is easy to get stung on costs.

What are the key jurisdictional incentives that drive exploration?
There are a few factors that drive exploration. The flow-through share tax credit is obviously helpful, and every province must employ it or else they will lose business to other provinces. Geological prospectivity is also very important. The most important factor, though, is the feasibility of a discovery actually becoming a mine.

What developments do you expect from clients this year?
Thus far in 2017, companies are focusing less on balance sheets and more on income statements and growing their businesses. We have recently spent more time on M&A deals, and we expect to see more consolidation, particularly among companies who have built assets in the past few years, as well as equity financing centered around project development. We also anticipate more IPOs over the next two years. Recently, investors have been more interested in base metals than they are in precious metals. Exploration expenditures have been light, but improving. Before getting involved in any project, BMO sends its own geologist and engineer to inspect it. Most investors do not have the luxury of geologists and engineers who answer only to them and our diligence is therefore important to our equity franchise.

Michael D. Scott



Director,
Global Investment Banking
RBC CAPITAL MARKETS

In the junior market, what trends have you identified over the past year?
In the last 12 months, we have witnessed a recovery in the resource sector broadly. I think junior companies have probably benefitted the least during this recovery, although access to capital for junior companies has improved somewhat. What we have seen over the last couple of years is an evolution to an environment in which companies that have the right capital markets profile are still able to raise money, but quality assets and top-tier management teams are paramount to success.

In what commodities have you seen more dynamism?
The precious metals space has been very dynamic in the last 12 to 18 months. Copper has also been a real focus as investors are still actively looking for new opportunities as worldwide demand continues to grow. On a shorter-term basis, we have seen a lot of buoyancy in zinc. In the capital markets arena, there are very few public investable companies in the zinc space, so the few companies that do exist have benefitted from this improving tone. Metallurgical coal is another example of a commodity that has demonstrated a strong recovery and improved investor sentiment over the last 12 to 18 months.

When assisting Vancouver based companies with operations abroad, in what regions have you witnessed more interest?
Yukon is an area where RBC is seeing a great deal of activity. We worked for Goldcorp in acquiring Kaminak Gold last year and I think that has created somewhat of a domino effect of other companies entering the area. There remains a lot of investor interest in the Yukon. In B.C., the Golden Triangle region has been a focus for investors over the last year. Low-risk, prolific jurisdictions like Ontario, Quebec and Nevada remain preferred geographies as well. Otherwise, Latin America will continue to attract interest, with certain geographies seeing a renewal in investor interest. Argentina and Ecuador, as examples, would appear to be increasingly accessible places to do business.

What role will foreign exchange play for investments in Canada?
We are seeing more companies that have historically not deployed capital into Canada more interested in doing so as a result of the cost advantages the depreciation of the Canadian dollar has afforded. This depreciation has had material and positive cost impacts on anyone with operating assets in Canada and the implication is that companies, who were previously working in far flung jurisdictions, now can look closer to home.

Image courtesy of Copper Mountain

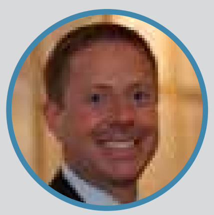
INSIGHTS FROM EXPERTS

"Aon's environmental risk experts recently developed a breakthrough reclamation surety bond solution as a superior alternative to traditional reclamation security typically satisfied through letters of credit. The solution was created for mining companies seeking to free up restricted capital secured for reclamation purposes. This benefits clients in all phases of the project life cycle: Pre-construction, construction, production, and care and maintenance."

- Andrew Russell,
senior vice-president, mining practice leader,
AON Risk Solutions

"The segment of the value curve we consider is taking pre-production assets into production. Therefore, we are specifically looking for teams of individuals who have experience building or turning around mines on time and budget."

- Caroline Donally,
director, mining deal team,
Denham Capital



"Junior mining companies are more willing to raise capital to put together larger, stronger exploration programs that will elicit better results than in the past few years. Money is available for these companies and this should result in more discoveries."

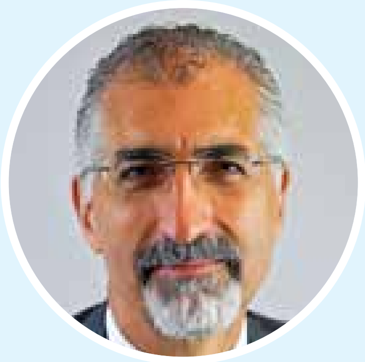
- Mike White,
president and CEO,
IBK Capital

"Getting our risk-reward equation right is how we make the most money for our shareholders and we do that by finding unearthed value the rest of the market has not yet seen."

- Nolan Watson,
president and CEO,
Sandstorm Gold

"The market began to take off in the fall of 2015 when we saw consolidation of Canadian brokerages and publicly listed junior mining companies. That volume has picked up dramatically in the past six months, and our Vancouver office has processed more than 350 non-brokered private placements over the past 23 months, the majority of which were junior financings."

- Mark Redcliffe,
executive vice-president,
Mackie Research Capital



Bradford Cooke

CEO
ENDEAVOUR SILVER

> "We are perhaps the most proactive of all the silver mining companies at investing in exploration, not just brownfields but greenfields exploration also. In addition to our three development projects, we have a number of exploration projects in Mexico and Chile."

Can you give us an overview of your next two mines, El Compas and Terronera?

In March, we announced a Preliminary Economic Assessment for El Compas, followed by a production decision. We are currently awaiting our explosives permit and we expect to break ground at the end of this quarter. El Compas is a small but very high-grade mine project, very accretive to cash flow. It has a four and a half year mine life, with a $10 million capex and only a 6-month development timeline. We think the project is very scalable and we can extend mine life and expand operations through exploration and acquisitions in the district of Zacatecas.

In April, we released a Pre-Feasibility Study on Terronera recommending production. We plan to make a production decision as soon as we receive the environmental permits, which should happen in three months or so. We hope to break the ground in the third quarter with production scheduled to commence at the end of 2018. Terronera is a large, high grade silver-gold mine project that could become our largest and very low cost mine. It has an initial 7.5 year mine life, a $69 million capex and an 18 month development time line. It is also very scalable and we have already discovered a second orebody with many prospective vein targets yet to be drilled.

How has Endeavour enhanced the efficiency of its operations?

We made great strides in the last five years at cutting our operating costs. We have reduced and re-trained our work force, we brought in more advanced mining and drilling equipment, for greater mechanization coupled with better management. In February, we hired a new VP of operations, formerly from Goldcorp, and who is a great addition to our team. We are hiring a new VP of engineering and new managers of mining, metallurgy and geology. The purpose of these new hires is to form a talented project development group responsible for developing our new mines, including El Compas, Terronera and Parral. Quality control and the introduction of new technologies will also be essential parts of their tasks. Since starting the company, we have always pursued a philosophy of continuous improvement.

How have you engaged with communities in Mexico?

We believe a happy community leads to a happy mine. Creating benefits for all stakeholders is core to our sustainability policy. The first thing we do when we start a project is build relationships with the community. In Mexico, the new mining duties were intended for the government to reinvest these into federal, state and municipal infrastructure projects but to a large extent, we are not seeing those funds being put to use yet. Therefore, we continue to invest in community projects ourselves because we cannot drop the ball on community engagement.

What are your plans for future exploration and acquisitions?

We are perhaps the most proactive of all the silver mining companies at investing in exploration, not just brownfields but greenfields exploration also. In addition to our three development projects, we have a number of exploration projects in Mexico and Chile. Guadalupe y Calvo is perhaps the most advanced of these. We kept the company's core group of exploration people and properties through the downturn so that we could stay ahead of the curve.

Where would you like to see the company in two to three years time?

We plan to build three new mines and grow our production by 50% over the next three years. The new mines will not only expand our production, they are also higher quality mines, so should help drive our operating costs down to the lowest quartile in the silver sector. All-in sustaining costs ("AISC") for El Compas are expected to be about $9.50 per ounce silver. Last year, the company's AISC costs were around $12.50 per oz silver. Terronera looks even better with AISC forecasted to be less than $5.00 per oz silver. These two new mines will have a big impact into turning Endeavour into a more efficient producer. Last but not least, we want to reload the development pipeline with some new larger projects so we have longer mine lives and investors can take comfort in owning shares of a company with a great future.

Mexico

Favorable regulatory environment attracts investments

Canada's mining preeminence is particularly evident in Mexico, where companies have invested and operated since the country opened its doors to the global mining industry in the 1990's. Canada remains the largest foreign investor in Mexico's mining sector, with projects scattered across its territory, from the desert of Sonora to the tropical forests of Guerrero.

Vancouver-based Endeavour Silver serves as a landmark example of the fruitful relationship between Mexico and Canada in regards to mining investments. The company arrived in Mexico in 2003 because there was a flat 30% tax structure and the government was open to facilitate business for the sector. Although since then a 7.5% royalty on profits has been introduced, the Mexican government is still hailed for its receptiveness and the ease of expediting permits. Endeavour Silver remained proactive throughout the bull market and emerged from the downturn with three development projects in its pipeline to fuel production growth over the next three years. The company announced a preliminary economic assessment for El Compas, located in the silver-rich state of Zacatecas, in March and is currently awaiting its explosives permit to break ground at the end of the second quarter. El Compas is a small but very high-grade project, with a low $10 million capex and a short six month de-

Image courtesy of SilverCrest Metals

velopment timeline. Moreover, in April the company released a pre-feasibility study on Terronera, located in the western state of Jalisco. Endeavour expects to break the ground in the third quarter of 2017 and commence production at the end of 2018. Terronera has an initial 7.5-year mine life and has the potential to become the company's largest mine when operational. Speaking about the company's prospects, Bradford Cooke, CEO at Endeavour Silver, declared: "We plan to build three new mines and grow our production by 50% over the next three years. The new mines will not only expand our production, they are also higher quality mines, so this should help drive operating costs down to the lowest quartile in the silver sector. All-in sustaining costs (AISC) for El Compas are expected to be about $9.5 per oz. silver. Last year, the company's AISC costs were around $12.5 per oz. silver. These two new mines will have a big impact on turning Endeavour into a more efficient producer. Last but not least, we want to reload the development pipeline with some new larger projects so we have longer mine

> We spent two years putting together the land package for Las Chispas. The whole premise for SilverCrest Metals is to undertake the same phased approach that has worked very favorably for us in the past. We have a lot of experience in that area and we have built strong relationships.
>
> - N. Eric Fier, president and CEO, SilverCrest Metals

lives and investors can take comfort in owning shares of a company with a great future".

Mexico has retained its attractiveness as a major mining jurisdiction largely as a result of reasonable timeframes in permitting and environmental studies. These aspects are of paramount importance for companies amidst the unpredictability of the markets witnessed over the past three years. Eric Fier, president and CEO at SilverCrest Metals elaborates: "I have worked in over 30 countries worldwide. From Siberia to Indonesia to Africa, and I would say Mexico is at the top of the list for one of the best countries to be in. The number one reason is that it is very reasonable to permit and hopefully it will remain this way. To give an example, Santa Elena was permitted under international standards, with environmental baseline studies and community relations studies in over a year and a half. Once we did all these studies and handed in our application for permitting, we had an open pit, heap leach permit within six months."

Fier developed the Santa Elena mine in the northern state of Sonora, now operated by First Majestic, and in 2015 created SilverCrest Metals. The company's flagship property is Las Chispas, conveniently located between Santa Elena and the Mercedes Mine. SilverCrest Metals is undertaking a drilling program to build resources around the asset in order to reach a critical mass with favorable economics.

As in every mining jurisdiction, community relations play a major role in project development in Mexico. In this regard, we have noted a favorable reception from local communities to mining investments throughout the country. Rural communities in Mexico are less developed and more vulnerable than its counterparts in Canada and the United States and therefore are very receptive to mining projects that bring about economic opportunities and well-paid jobs. Ralph Shearing, president at Telson Resources describes the dynamic around the community relations at the company's Tahuehueto project: "The local community is located onsite, and Telson has a long term agreement with them in place. The local residents want the work and the development and they even act as our security because they want us there. We have made a point to foster a good relationship with the community over the past 20 years. Durango, in general, is one of the most promining regions in Mexico, and there is far less risk to operating there than what may be perceived."

Last June, Telson commenced pre-production mining at its gold/silver Tahuehueto project in Durango. Additionally, the company completed this year the acquisition of 100% of the Campo Morado Mine, previously owned by Nyrstar Mining. Telson is placing a special emphasis on maximizing recoveries of all economic metals at Campo Morado, including gold, silver, zinc, lead and copper.

Avino Silver and Gold Mines has also got a long history of operating in Durango, where its namesake property and the San Gonzalo Mine are located. Together, these silver, gold and copper producing mines have broken production records for the company over the past two years. Most importantly, Avino serves as an important example for producers in Mexico and worldwide, as the company has partnered with the South Korean electronics giant Samsung to sell 100% of their silver concentrates in Mexico. Speaking about this landmark agreement, David Wolfin, president and CEO at Avino explains: "They [Samsung] want their raw materials for electronics and construction sourced because they have ethical funds and on their stock they don't want bad press that could lead to a boycott of their products. They hired SRK Engineering and toured the property and ultimately put the seal of approval for the project. In 2016 we closed the deal, they gave us $10 million in the way of an offtake agreement. That money will be netted off deliveries."

Vancouver-based companies will retain their appetite for investments in Mexico as long as this Latin American country keeps offering favorable conditions for exploration, permitting and operations. Mexico's proximity to Canada and apt weather conditions for exploration year-round make it a go-to choice for juniors based in North America's exploration capital. —

> There are three major factors that have helped us maintain and improve our efficiency. First, Mexican mining engineers...second, we have been lucky in that the ground is exceptional and third, our miners are quite talented and methodical and their flexibility is extremely beneficial.
>
> - Frederic Davidson, president and CEO, Impact Silver

Lawrence Page & Robert MacDonald

LP: Chairman
RMD: VP of Geological Services
BRAVADA
MANEX RESOURCE GROUP


LP


RMD

What are Bravada's plans for the Wind Mountain property?
RM: The plan is to drill two or three Proof-of-concept holes this Fall to determine if the high-grade "feeder" is located where we think based on our 3D geologic modelling.

To what do you attribute Bravada's success in attracting noteworthy partners for the development of your properties?
RM: Bravada conducts significant geologic work to develop high-quality exploration targets that could develop into mineral deposits that are of the size and grade that will be attractive to major mining companies.

What are your exploration plans for Quito and Baxter and what are your longer term plans for these properties?
RM: Kinross has begun its third phase of exploration drilling at Baxter and Coeur is planning to begin its second phase of exploration drilling at Quito. Drilling at Quito is restricted until after July 1st to accommodate migratory birds that may pass through the region. Our longer-term plans for these two properties depend on results from these partner-funded exploration programs.

What are the particularities of Cerro Las Minitas and what is Southern Silver's strategy in advancing the project?
RM: Our strategy for advancing the Cerro Las Minitas project is to continue to define the po-tential size of the deposit, move the resource to a higher category, begin preliminary development studies such as internal scoping, PEA, further metallurgy, Prefeasibility to a point where a production decision can be made. Options available for Southern Silver as we continue to advance the project is; to continue as a joint venture partner with Electrum and maintain our position into production; Electrum may offer to acquire a 100% of the project (requires a third party valuation); A merger with Sunshine Silver Mine (owned by Electrum); A buyout by a third party.

What are the key characteristics that you look for in a project and what are the key features of Bravada's and Southern Silver's property portfolio?
RM: For Bravada, ultimately we look for projects that we think can develop into high-margin, large gold deposits that will be attractive to major mining companies. Nevada has an unusually large number of such deposits, as shown by the amount of gold produced for decades. Important new discoveries continue to be made in the state; thus, it remains the focus of our exploration plans. We specifically look for projects where we can identify specific work that will advance the project towards the identification and development of a high-margin, large deposit. We then evaluate the risk to reward ratio of acquiring that property and doing the required work to bring in an appropriate funding partner for further development.

Image courtesy of Shutterstock

USA

With a shared border of 5,525 miles, Canada and the United States are two closely linked economies and the mining industry clearly showcases this trend. Canadian companies are increasingly looking south of the border as they become mindful of investments in safe and stable jurisdictions such as the United States, one of the most advanced mining jurisdictions in the world but with great potential, particularly along underexplored regions in the Midwest and Alaska's vastness.

Trilogy Metals already holds a 43-101 resource on its Arctic and Bornite properties in Alaska. At 36 million mt of 6% copper equivalent, Arctic is one of the highest-grade open pit copper projects in the world. Trilogy plans a $7 million drilling program this summer and envisages a pre-feasibility study by the first quarter of

"Nevada is a very mining friendly state and there is a highly qualified technical workforce. The state and the regulators are knowledgeable and helpful to the mining industry at large. The government is very stable, which adds to it being a good jurisdiction to be in."

- William Howald, president and CEO, Rye Patch Gold

Image courtesy of Eagle Mapping

2018. Trilogy entered into a 50/50 JV with South32 to develop Bornite, envisaging a $10 million investment per annum over the next three years. Bornite contains roughly 6 billion lb of copper at 1% open pit and 3% underground. Speaking about the company's strategy to maintain shareholder value, Rick Van Nieuwenhuyse, president and CEO at Trilogy, noted: "Trilogy Metals' strategy, in short, is to execute our plan. We will continue working toward our pre-feasibility study on Arctic and we will look forward to some exciting drilling results at Bornite later this year. Investors can look forward to a lot of news-flow from this year's activities."

In the mainland United States, companies are increasingly looking at assets in developed jurisdictions with a long tradition in mining, such as Nevada, Colorado, or South Dakota. One such company is Mineral Mountain Resources, which currently holds one of the most extensive gold districts in the country. Since 2012, Mineral Mountain focused on an area locally called the Rochford Gold District, centered about 26 km south of the renowned Homestake mine in South Dakota, which was continuously mined for 135 years. Over the years, the company consolidated a large contiguous land package and has since performed the first high-resolution airborne Mag-Em survey in the area. Remarkably, the company was able to consolidate the land package and existing data dating from the early 1900s during the worst period of the downturn. However, as market conditions have improved, Mineral Mountain is now poised to move forward with an aggressive exploration plan, comprising 20,000 meters drilling in 2017, divided equally between the Standby mine deposit and the South Cochrane trend. Based on initial exploration work, the company believes that the Rochford district hosts a Tier 1 gold system with more than one economically feasible deposit. Nelson Baker, president and CEO at Mineral Mountain, elaborated on the strengths of the project: "After Nevada, the Homestake Gold Trend is the second largest gold-producing area in the United States. Over the past year, we have been offered several opportunities to joint venture our 100% owned Rochford project, but we prefer to enhance the value of this project by drilling our most advanced Homestake-style target…For over a century, the global mining industry viewed the Homestake mine as a unique event. Our research and database compilation since 2012 in the Rochford district clearly dispels that theory. We believe we have five separate Homestake-style gold trends located within our present land package that could host large-scale deposits."

Further south, the Western state of Nevada is experiencing renewed interest from gold prospectors and companies with strong ambitions. Like much of the Western United States, the appetite for gold of its earliest settlers shaped Nevada's history. This year, Rye Patch Gold became the state's newest gold producer. The company holds the Florida Canyon mine operation, which has a capacity of 180,000 ounces of gold per year. Additionally Rye Patch controls 45,000 acres of land and the company expects to become North America's next mid-tier gold producer over the coming years. Bill Howald, president and CEO at Rye Patch, shared his insights on the advantage of operating in the region: "Nevada is a very mining friendly state and there is a high qualified technical workforce. The state and regulators are knowledgeable and helpful to the mining industry at large. Rye Patch controls a trend in Nevada that has operations and a pipeline of resource projects, which is ideal because the company can grow organically."

Interest in Nevada has also come from B.C.-based juniors that regard this state as a viable alternative for projects during the harsh winter months in British Columbia and Yukon. Such is the case of Colorado Resources whose CEO Adam Travis noted: "As much as we love British Columbia and as much as infrastructure has improved over the years, exploration remains challenging in the winter months due to the volume of snow that hits the region. Colorado Resources has been looking at projects in warmer climates and we announced on December 2016 that we have optioned a property in Nevada…We had been considering acquiring the property in Nevada for about three to four years. The silver lining of the global mining downturn is that exploration projects are more affordable."

Although operational costs in the United States can often exceed those in Canada and certainly those in Mexico, large swathes of territory remains underexplored and projects with very favorable economics can be developed. Additionally, hype around the Trump administration's promises on tax incentives and infrastructure developments have raised prospects for industries such as mining.

Rick Van Nieuwenhuyse

President and CEO
TRILOGY METALS

Can you elaborate on Trilogy's work and plans for its properties?
Trilogy Metals has published a 43-101 resource on both the Arctic and Bornite properties, known collectively as the Upper Kobuk Mineral Projects. The Arctic property is the most advanced of the two, and we are currently working on a pre-feasibility study for it. We recently updated the resource estimate by doing all the infill drilling and publishing a new indicated resource that was about 50% bigger than the previous resource. At 36 million tonnes of 6% copper equivalent, I cannot think of a higher-grade open-pit copper mine in the world. We have planned a $7 million drilling program for this summer with the objective of releasing the pre-feasibility study by Q1 2018. In addition to the resource update, the metallurgy, hydrology, pit slope stability, and geotechnical work have all been completed. Now we have to determine the best location for the mill, tailings, waste rock storage and mine support facilities to complete the pre-feasibility study by Q1 2018.
The Bornite property is substantially larger than Arctic, containing roughly six billion pounds of copper at 1% copper open-pit and 3% copper underground grades. We are still determining whether the cobalt found on the property will become part of our resource. We have only been exploring the property for three years, so we made a strategic decision to focus on Arctic and find a partner to help us with Bornite, which we did by announcing an option to 50/50 joint venture with South32. South32 is a large metals mining company producing a variety of metals; however, they do not currently have a copper producing asset in their portfolio, which makes us an attractive investment for them. We had expressions of interest from other companies, but South32 proposal recognized the value of the work we have put into the property, as well as the amount of capital our shareholders have invested. The value of the deal is based on what our shareholders have spent on the property, as opposed to the market's perception. South32 will invest $10 million per year for three years ($30 million) and then to form a 50/50 JV they must contribute $150 million. That is sufficient capital to get both projects through to a construction decision.

How has Trilogy Metals raised capital?
Aside from the money spent by shareholders, Trilogy Metals has not done a true financing since we spun out from NovaGold. In 2015, however, we acquired a company called Sunward that had $20 million in cash, but was trading in the market at a $10 million value. We acquired that company for $23 million in Trilogy shares. Along with the $20 million in cash came a large copper-gold asset in Colombia, which we sold in August 2016. Combining the sale of that asset with the original acquisition of shares, we raised $33 million for only $23 million.

How would you compare the permitting processes between the US and Canada?
The permitting processes in the US and Canada are quite similar, each having federal and state or provincial oversight and regulations. One advantage Alaska has over Canadian jurisdictions is the relationship the Alaskan Native Corporations have with the mining industry. Alaska settled its aboriginal entitlement rights under a piece of legislation called the Alaskan Native Claims Settlement Act in 1971. We work with the NANA Regional Corporation, an Alaska Native Corporation which has a long history of mining gained by developing and operating the Red Dog zinc mine with Teck. Red Dog has paid NANA about $1.5 billion in royalties, which has gone toward funding the Northwest Arctic Borough government and the local school district. We reached an agreement with NANA in 2011 and they have been very supportive of our efforts to advance the Upper Kobuk Mineral Projects.

What is your strategy to maintain shareholder value going forward?
Trilogy Metals' strategy, in short, is to execute our plan. We will continue working toward our pre-feasibility study on Arctic for completion in Q1, 2018, and we will look forward to some exciting drilling results at Bornite later this year. Investors can look forward to a lot of news-flow from this year's activities.

Nelson Baker

President and CEO
MINERAL MOUNTAIN RESOURCES

Can you provide us with an overview of the Rochford Gold System?
Our technical team had extensive international experience with iron formation hosted gold deposits including the Black Hills, such as in the Mount Magnet near Kalgoorlie in Western Australia as well as the Meliadine (Nunavut, Canada) deposit and the Musselwhite deposit in Northwestern Ontario, Canada . I attended and graduated from the South Dakota School of Mines located in Rapid City, South Dakota. The Homestake Mine was a major economic stimulator for both Rapid City and the School of Mine. While attending the university, I became familiar with the Homestake Mine having made several underground visits, and, I was always intrigued by the unusual size and the high grade of the deposit. Recently, we also learned that the mine had never ran out of mineable ore and closed in 2001 because the deposit had gotten too deep and too hot to work at the deep levels. Profitable production in the latter years of the mine's history became a serious issue. During the last twenty years of Homestake's mine life, management dedicated a $70 million budget specifically to find other peripheral, near surface iron formation hosted gold deposits along the Homestake Gold Trend. This program resulted in two new discoveries; the first, a rich high grade gold deposit 2 miles north of the mine, and, the second discovery, a Homestake-style gold zone down plunge from the Standby Mine located 26 km to the south of the mine. Primarily due to market conditions and low gold prices both new gold discoveries were never developed.

What are your exploration plans for Rochford?
Conceptually, we are planning to drill 20,000 meters in 2017, divided equally between the Standby Mine deposit and South Cochrane trend. Typically, our method of drilling will be to target the gold zone with a pilot hole, and, based on positive analytical results of the mineralized intersection, we drill a series of multi-directional holes off that pilot hole. This drilling plan minimizes actual drilling costs and greatly reduces surface disruption.
Our database compilation is also telling us that we need to pick up a couple of other strategic land packages after securing the necessary financing to acquire these properties. We are also planning to expand our airborne Mag-EM survey both north and south of the present survey area and have a professional geophysical consulting group further massage and refine the survey data. As well, we would like to complete an airborne gravity survey over some parts of the property to better define the thicker parts of the iron formation bands. As evidenced lately, the industry right now is very susceptible to new gold discoveries and companies announcing significant gold intersections are experiencing rapid rises in their share price along with large volumes of trading. We have been through many similar cycles and, from our experience, this is usually the first important signal that investors are once again interested in investing in advanced exploration.

What are your capital-raising efforts looking like this year?
We are planning to raise $3.7 million just to drill our Standby Mine target which, based on our database, is a compelling Homestake-style target. Prospects for raising capital have improved significantly since early March 2017 especially for advanced gold projects like our Rochford Gold Project.

What are the strengths of operating in a jurisdiction like South Dakota?
The State of South Dakota and, in particular, the Homestake Gold Trend area is in a safe, mining friendly jurisdiction with above average infrastructure, low cost of exploration with a strong available labor force. Homestake Mining Company, mined continuously for 135 years and was one of the first mining companies to list on the New York Exchange. The Homestake Mine is known globally as the largest and richest gold deposits if it's kind. In South Dakota, local communities and the government recognize the economic impact that the mine had in the state and its importance to the local economics in the nearby communities by creating jobs. For example, the Wharf Mine, a few miles north of the Homestake Mine, is currently an open-pit producing mine in the area adjacent to a ski hill, a testament of the community working in harmony with mining. Our corporate mandate is to be responsible, corporate citizens by exploring sensibly and by protecting our environment. During the drilling programs, we guard against drill fluids spilling into the local watersheds, and we re-seed all of our drill set ups and access roads. To maintain a strong rapport with the local governing bodies and the Bureau of Land Management, we engage the top-consulting firms that are familiar with the drill permitting process to help us guide us.

Graphite

Boosted by an electric future

Image courtesy of Katie Bromley

The need to develop cleaner technologies will be one of the main innovation drivers for years to come. The rhetoric of politicians and the business community increasingly stresses the need to protect the environment by improving means of transportation, energy storage and generation capacities. In every industry, the economic incentive for developing products and technologies that are also environmentally friendly is imperative but analysts increasingly agree that eco-friendly also means business-friendly, and the mining community has already paid attention to this trend.

According to the latest figures by the United States Environmental Protection Agency, roughly 14% of global greenhouse gas emissions were derived from transportation and in the United States, the share is almost twice as large, accounting for 27% of total greenhouse gas emissions. With the ongoing urbanization trend worldwide, the need to develop efficient and clean means of transportation for hundreds of millions of new urbanites globally has become imperative in order to avert environmental crises with grave health consequences.

It is under these circumstances that zero-emissions mobility has emerged as one of the most followed-after technological trends. For years, automakers have focused on producing more efficient, less fuel intensive vehicles but only as of late has the impetus of totally electric cars gained traction. In this regard, the Silicon Valley electric carmaker Tesla is largely behind the hype in the car industry's electric revolution. This company founded only in 2003 has already exceeded the market value of legendary industry giant Ford Motor Company and briefly exceeded that of General Motors in April to become the United States' most valuable automaker. Although Tesla's models are far from being a common sight in metropolises worldwide, its products' potential is highly praised and the motor industry has bet on an electric future with BMW, Nissan, Daimler, and others announcing ambitious plans.

This paradigm change has brought attention to the commodities needed to produce lithium-ion batteries, mainly cobalt, nickel, lithium, copper, and graphite. These so-called 'green metals' have garnered attention as of late since demand is expected to soar importantly as the transport industry moves toward an all-electric future. Estimates suggest that by 2035 there could be over 140 million electric vehicles circulating, up from just over one million today.

Despite the name, lithium-ion batteries contain from seven to ten times more graphite than lithium, partly the reason why graphite has until now, been somewhat overlooked by the markets. In fact, graphite prices are largely determined by its consumption in steel, a market that has remained stagnant over the past years. However, graphite will be increasingly tied to the electric battery market for vehicles and energy storage as both synthetic graphite and natural spherical graphite for anode material is used for these batteries, comprising roughly 15% of the total cost of a cell. In order to highlight the importance of graphite for years to come, Tesla CEO Elon Musk has declared: "Our cells should be called Nickel-Graphite, because primarily the cathode is nickel and the anode is graphite with silicon oxide."

Conservative estimates suggest that the battery anode market for graphite will have tripled from 2015 to 2020, to at least 250,000 tonnes. Nonetheless, graphite production is confined to only a handful of countries, with China alone accounting for 65% of global graphite production.

"

China is the main producer of graphite in the world but our operations are much more environmentally friendly compared to the Chinese. In our case, we will not use acid. It is an awareness issue that is coming more into the light because consumers are increasingly mindful of where their devices were made and under what conditions.

- Anthony Huston,
president and CEO,
Graphite One

"

Image courtesy of Katie Bromley

Chinese dominance over the graphite market has not only worried clean-energy investors but also consumers, worried that the raw materials used to power their day-to-day devices are often mined in precarious conditions and under dubious environmental circumstances.

Therefore, the mining community has paid increased attention on the development of graphite projects in jurisdictions that are ethically more aware, such as North America. In the northernmost U.S. state of Alaska, Vancouver-based Graphite One Resources is developing its namesake project, with favorable results so far. Graphite One's average grade is about 7.2%, more than the average grade of the second largest graphite project in the United States, standing at about 2.5%. Moreover, the nature of the graphite would allow manufacturers to use up to 75% of the material because it is found in a natural spheroidal form. The company is not only bullish on the graphite market but also on graphite projects in North America, as the region currently hosts only two flake graphite facilities, despite increased demand and the opening of Tesla's $5 billion battery Gigafactory in Nevada. Speaking about Graphite One's prospects, Anthony Huston, president and CEO, explains: "Graphite One's goal is to process and upgrade the graphite at our plant in Alaska. It must be economically viable and we are currently working closely with the Alaskan government. We are hoping the state government helps us with power costs so that we can keep our operation local instead of using a plant in Washington state…Graphite One is financed through the pre-feasibility stage, which we did through capital markets. Our next step is to find a joint venture partner to take the project to the next level, and we aim to find this partner in the next six months."

Located just 35 kilometers from the city of Nelson in British Columbia, Eagle Graphite owns one of the two operational flake graphite mines in North America, the Black Crystal Graphite Quarry. Over the past year, the company has successfully taken the project forward and in July, it announced a $30 million financing from San Francisco-based US Capital Partners. Speaking about Black Crystal's strengths, Jamie Deith, president at the company explains: "We have a long-term supply contract with a rather large American graphite purchaser for 3,000 tons per year, and they could potentially purchase considerably higher quantities than that… from a logistical perspective, Eagle Graphite is by far the closest graphite project to what is expected to be the biggest source of demand in North America, which is Reno, Nevada. There is a nearby rail line that connects us to Nevada with a single carrier. We also have the most environmentally-pristine operation that I am aware of in the graphite market."

Over the coming years, graphite projects worldwide will receive a boost from a long-term surge in demand. Most importantly for the region, North America is poised to be a driver of graphite exploration and production for the coming years, as US-based companies outline ambitious plans in electric vehicle production and energy storage batteries, while expressing their desire to source their raw materials to environmentally-friendly mining jurisdictions, such as the United States and Canada.

Colin Hardie

Director, Mining and Process Studies, Mining and Metals
BBA

What have been the major developments for BBA over the past year?

The past year has been very exciting for BBA as we have come through the downturn in a very good shape and our backlog increasing. We are a fairly diversified company, with mining and energy related work being fairly balanced in terms of revenues. We see activity increasing in the mining sphere. We are building a laboratory in the Toronto area to provide proprietary metallurgical testing, to allow our engineers to practically test some of their ideas and to support our in-house design capabilities. We are broadening our scope, looking at resource modeling and resource estimates while we also have a new teams with expertise in environment/permitting, tailings management facility design and underground mining engineering. With these developments, we are going to be able to be a one-stop shop for companies that want to have one solution provider. All of this growth has been organic and our company is on the lookout for small engineering and consulting companies in the Vancouver area to support our strategy there.

What is your growth strategy in British Columbia and Yukon?

Currently we prove services on automation, electrical engineering and mechanical engineering from our Vancouver office but we would like to have more of a local presence. We are trying to find a group that is in the geotechnical and environmental engineering sphere, especially in B.C. because our environmental group in Eastern Canada does not know the local regulations and conditions in B.C. We like to be close to our clients and this has been our strategy throughout Canada.

In what stage of the mining value chain is BBA more active?

We are just getting involved in the resources estimation and evaluation area. Our strongest point is in front end studies, where our experts can bring added value to our clients. At the moment we are a little less active in the project execution phase because there aren't many projects in the pipeline. We think that in the front end studies area we can give clients better bank for their buck and really make a drastic and dramatic improvement in their project before it gets built. We are a very strong company in commissioning and the starting up of projects. In the end we want to be with our clients during their operations and help them on optimization and efficiency. Usually the consulting and engineering companies do the design but do not stay along as the projects mover forward, however, we want to be on site during the whole period. We find that this serves as feedback and continuous improvement for our clients and us.

How do you help clients reduce operational costs?

In our front end studies mining we ensure that we optimize the operating costs of the project as those are often more important to the overall project economics than the initial capital. We usually review the projects and highlight opportunities that would help us to compress the footprint of the project and enhance overall optimization. We are very good at making the best economic project, for example we have helped clients reduce energy costs by performing ore sorting and separation as early in the process as possible, as crushing and grinding are very energy-intensive.

What trends have you identified in terms of demands from your clients?

Clients are increasing asking for commissioning, ramp up assistance, and long term strategic planning. They've cut back on in house technical teams and this represents an opportunity for us. Unfortunately, people left the industry during the downturn and there is a shortage of mining engineers. In the current cycle, studies that were used a couple of years ago have had to be updated, so we have had to re run these and review scenarios. Moreover, companies are increasingly looking at ways to reduce the size of projects while making their operation lives longer. Regulations on the environmental side are changing and this will result in companies getting second opinions and perform tailings dam safety analyses. We are involved in this aspect and we count with experience in the mining and hydro dam industries.

José J. Suárez

President, Mining and Metallurgy

SNC-LAVALIN

What have been the major developments and focus areas for SNC-Lavalin over the past years?

SNC-Lavalin is made up of four sectors, including Mining & Metallurgy. Our main regions of operations for Mining & Metallurgy are EMENA and Latin America while we also have a strong presence in North America, Australia and South Africa. In terms of commodities, we think copper will become increasingly important because of the continued decrease of stockpiles. We think that we are heading toward a situation where demand is going to outstrip supply. Our Chile office has performed really well, we have grown tremendously and we have secured a lot of projects. Alumina is another commodity that is looking positive, specifically in Africa. Fertilizers have also experienced a boom, and we are have significant experience with ammonia and with non-ammonia based fertilizers. Finally, we are looking at minerals for batteries for electric cars, such as lithium and graphite. Overall, we do not expect to see a lot of big projects in 2017. However, we have changed our strategy and now roughly 40% of our work is devoted to sustaining capital projects, as opposed to working only on big-scale projects. This strategy has allowed us to fare the fluctuations of the commodities cycles.

What are the key characteristics that you look for in projects?

The rate of return, which should be between 12-15%. Second is that the miner has a supply chain, meaning that the ore that will be mined and produced already has a market. Finally we want to have involvement in the project. If a project is viable as far as rate of return, off-takes and we can be involved in terms of engineering procurement and construction, and operations and maintenance then we are very interested.

What trends have you noted on automation and technological implementations?

You need to look at the whole supply chain. When you look at stackers and/or reclaimers, in many cases they can be automated because it is a dangerous operation and you can be operate them remotely. When you look at ore piles that need blending, we use GPS tracking so that the operator can know which piles have what varying ore percentages. Another example is the automation of trucks and mining equipment, a lot has been done on this front but now we are working in the integration of this so the client can operate from a remote control center. We can provide data for our clients but the biggest challenge is to bring the right data to make the right decisions.

SNC-Lavalin was awarded the Canadian Consulting Engineering Award for your work on Goldcorp's Eleonore mine, to what do you attribute this recognition?

We were honored to receive that award. One of the things that our CEO acknowledges is that we are a company that is people-oriented. I experience that in our projects in Turkey or Chile. Our culture is to understand our clients, to address their needs and when we make mistakes, we recognize the mistakes and correct them.

How is the company innovating on the sustainability and environmental front?

This is one of the areas that I am more proud of as we really stand out in terms of technology. Our Chile office is a leader on thickened tailings technology, which means that we extract the water off the tailings and stack the tailings. This substantially decreases any problems with the dam failures. The imprint that we foresee from our design is harmless to the environment.

What are you finals remarks for our international readership?

North America is an area of increased focus. We want to make sure that we find the right projects. When you look at our Mining and Metallurgy sector, it is evident that we are different from our competition. We operate from pit to port and from studies to project exception, with a strong operations experience. This makes us different. We place a big emphasis on diversity, and culture, and we are close to our clients, to understand and meet their needs. In this regard, project assurance, done with zero harm, on budget, on schedule, and at the highest quality levels, is our trademark.

This list intends to include just a representative sample of companies operating in the BC and Yukon Mining sector, and as such it should not be considered a guide to take investment decisions.

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