DIGGING DEEPER

STRENGTHENING ONTARIO'S MINING ADVANTAGE





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ABOUT THE ONTARIO CHAMBER OF COMMERCE

For more than a century, the Ontario Chamber of Commerce (OCC) has been the independent, non-partisan voice of Ontario business. Our mission is to support economic growth in Ontario by defending business priorities at Queen's Park on behalf of our network's diverse 60,000 members.

From innovative SMEs to established multi-national corporations and industry associations, the OCC is committed to working with our members to improve business competitiveness across all sectors. We represent local chambers of commerce and boards of trade in over 135 communities across Ontario, steering public policy conversations provincially and within local communities. Through our focused programs and services, we enable companies to grow at home and in export markets.

The OCC provides exclusive support, networking opportunities, and access to innovative insight and analysis for our members. Through our export programs, we have approved over 1,300 applications, and companies have reported results of over \$250 million in export sales.

The OCC is Ontario's business advocate.

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The OCC owes a debt of gratitude to the members of its Mining Advisory Council for contributing their expertise to this project. Please note that the opinions expressed in this report are not necessarily the opinions of individual members of the Advisory Council.

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A LETTER FROM THE PRESIDENT AND CEO

Ontario's mining sector is one of the most important economic drivers in the province. Our long history of mineral production has been successfully leveraged to position the province as a global hub for mining finance and create global demand for Ontario mining expertise. In addition, mineral production activities support a mining innovation ecosystem that has the potential to be world leading. Mining activities continue to drive growth and create new opportunities in all regions of the province.

That said, it is no secret that the global mining industry is in the midst of a downturn. Global economic uncertainty and lower demand have created challenging market conditions for mineral products. In addition, mining companies are finding it increasingly difficult to attract new investment. These global factors have had a negative impact on Ontario's mining sector.

The fortunes of the mining sector in the province are not exclusively tied to these global factors, as the sector also faces several Ontario-specific challenges, including regulatory uncertainty, a lack of essential infrastructure, and rising costs. As a result, despite the global strength of our homegrown sector, an upswing in global mining fortunes will not necessarily translate into renewed success for Ontario.

To ensure mining remains an economic driver in Ontario, we need to actively create an environment that will attract future mining investment and build on our comparative advantage.

The recommendations contained in this report are designed to move the province down this path. By taking action to coordinate infrastructure investment, boost funding for research and innovation, increase regulatory certainty, and improve access to capital, Ontario can position itself for success when global mining fortunes begin to turn for the better.

In the coming weeks, the Government of Ontario is expected to release a renewed Mineral Development Strategy, which will provide a framework for future mineral development in the province. We hope that the renewed strategy provides the impetus for all levels of government, industry, and Aboriginal communities to work together to position Ontario mining for success.

Sincerely,

Allan O'Dette, President & CEO Ontario Chamber of Commerce

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SUMMARY OF RECOMMENDATIONS

TO ENSURE MINING REMAINS AN IMPORTANT ECONOMIC DRIVER IN ONTARIO, THE ONTARIO CHAMBER OF COMMERCE RECOMMENDS THAT THE FOLLOWING STEPS BE TAKEN:

- Boost investment in northern infrastructure and coordinate infrastructure planning with mining, Aboriginal, and northern interests. The Government of Ontario should broaden the mandate of the Ring of Fire Infrastructure Development Corporation to seek out these opportunities.
- 2. Provide a single list indicating which Aboriginal communities a mining company needs to consult when pursuing the development of a particular project.
- Develop and implement a resource revenue sharing (RRS) framework to allow
 Aboriginal communities to derive clear benefits from resource development projects in Ontario.
- 4. Increase the Ontario Focused Flow-through Share Tax Credit from five percent to 20 percent to bring it in line with other provinces.
- 5. Extend the availability of the federal Mineral Exploration Tax Credit (METC) for three years and create an enhanced METC for remote projects.
- Commit to maintaining current provincial mining tax rates for remote, non-remote, and diamond mining operations.
- Increase Ontario's investment in mining research and innovation for three years to sustain mining innovation activity in the province through the downturn.
- 8. Conduct or commission a benchmarking study to better understand Ontario's attractiveness as a mining jurisdiction relative to its competitors.
- 9. Leverage the demand for Ontario mining expertise to drive growth. As a start, government and industry should collaborate to create new business opportunities via the industry's global networks.

INTRODUCTION

For the past five years, Ontario's mining sector has faced a challenging business environment. Globally, the mining sector has struggled as economic uncertainty and a fluctuating commodity cycle have created tough market conditions for many mineral products. In turn, these factors have increased the wariness of investors.

Despite this downturn, Ontario has many of the ingredients necessary for the mining sector to remain an economic driver for the province. Ontario's mining community continues to demonstrate global leadership in mining finance and associated services, as well as improve its domestic mining research and innovation network. In 2014, the value of mineral production reached its highest level in a decade. Moreover, significant mineral deposit discoveries in northern Ontario, including the Ring of Fire, hint at future opportunities for mineral production.

Recent developments at the federal level, including commitments to invest in national infrastructure, improve relations with Canada's Aboriginal communities, and strengthen federal-provincial relations, add to this positive long-term outlook.

However, the future success of Ontario's mining sector is not guaranteed. At the provincial level, changes to the mining landscape are creating additional challenges. Reduced clarity surrounding Aboriginal consultation has greatly increased regulatory uncertainty. At the same time,

resource development projects are experiencing steadily increasing costs. For example, industrial electricity rates have increased by 16 percent over the past few years and will continue to rise for the foreseeable future. This situation puts both existing mining operations as well as future developments at risk.

Waiting for the next upswing in the mining cycle is not a sufficient response to these challenges. Active steps must be taken to ensure that the mining sector is set up for success in the future. This period of weakness in global mining affords Ontario a critical opportunity to take these steps.

That is the goal of this paper. First, the paper presents a snapshot of Ontario mining and its contributions to the economies of communities across the province. Second, it provides a series of recommendations that will ensure mining remains a strong contributor to the province's economy going forward. In order to provide tangible and constructive recommendations, this research has been guided and vetted by the Mining Advisory Council of the Ontario Chamber of Commerce (OCC).

The mining sector has a long history of bringing benefits to communities across Ontario. With the right steps, it will continue do so in the future.

MINING - A COMPETITIVE ADVANTAGE FOR ONTARIO

Ontario's mining sector has been a consistent economic driver in the province for a number of decades. Mining has brought economic development opportunities to many regions of the province, and continues to do so. At the same time, the strength of domestic mineral

production has created industry clusters, including mining finance, and allowed Ontario to become a leading mining jurisdiction. As evidenced below, it is clear that Ontario's mining sector is a competitive advantage for the province.

Figure 1 - Mineral production in Canada by province/territory, 2014



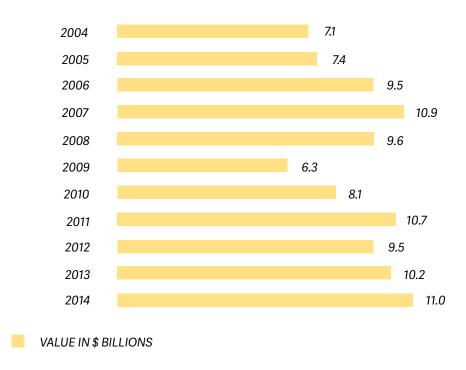
Source: Natural Resources Canada

MINING OPERATIONS IN ONTARIO

To most Ontarians, the mining sector in the province is synonymous with mining operations, or mineral extraction at physical mine sites, plus associated processing and smelting activities. To a certain extent, this perception of the sector is understandable. When it comes to mining, Ontario is a mineral production powerhouse within Canada. Currently, there are over 40 mines in operation in Ontario. Last year, these sites collectively produced \$11 billion worth of mineral product, more than any other province or territory.

Quebec and Saskatchewan, the second and third largest producers in 2014, produced \$8.7 billion and \$7.1 billion, respectively (Figure 1). Moreover, the value of mineral production in Ontario has been increasing since the early 2000s, and has continued to rise throughout the global downturn in the mining sector (Figure 2).

Figure 2 - Ontario mineral production, 2004-2014



Source: Natural Resources Canada

The significant and growing value of mineral production in Ontario is an important contributor to Ontario's economy. According to an analysis released by the Ontario Mining Association, each additional \$1 billion of mineral production in Ontario contributes \$858 million to the province's GDP and creates nearly 4,500 jobs (Dungan and Murphy 2012).

In 2014, mining and quarrying activities directly generated over \$8.3 billion in real GDP in the province, more than was generated by motor vehicle manufacturing, agriculture and forestry, and arts and entertainment (Statistics Canada). This value does not

include the many spin-off benefits that mining activity creates in communities across the province.

Mineral production and its associated services also provide important economic opportunities to Ontario's Aboriginal communities. Across Canada, the mining sector is the largest private sector employer of Aboriginal people: Aboriginals account for 7.5 percent of the total mining labour force, while accounting for only 3.8 percent of the Canadian population. Indeed, their participation rate in the mining sector is higher than in the rest of the labour force (MiHR 2013). In Ontario, Aboriginal employment accounts for 9.7 percent of total mining jobs (OMA 2015).

FUTURE MINERAL PRODUCTION IN ONTARIO

Ontario benefits from both a rich geological endowment and an active exploration community. The province's mineral exploration community is the most active in Canada, with over 250 companies undertaking more than 400 mineral exploration projects (OPA 2014). From this prospecting activity, there have been a number

of promising discoveries, including the Ring of Fire in Northwestern Ontario. From a geological perspective, mining has the potential to continue as an important economic driver of the province.

Ontario's Ring of Fire – A 100-year Opportunity

Ontario's Ring of Fire is a mineral-rich area located in the James Bay Lowlands region of Northern Ontario. Since the early 2000s, significant deposits of copper, zinc, nickel, platinum, vanadium, and gold have been found in the region. In addition, large quantities of chromite (an essential component of stainless steel) have also been found, the first such discovery in North America.

In Beneath the Surface, the Ontario Chamber of Commerce conducted an economic analysis of Ring of Fire development, based on estimates of proposed projects. The analysis showed that within the first 10 years of its development, the Ring of Fire will:

- Generate up to \$9.4 billion in GDP;
- Sustain up to 5,500 jobs annually; and
- Produce nearly \$2 billion in government revenue, divided between the federal, provincial, and municipal governments (Hjartarson et al. 2014).

As identified in Where Are We Now?, there remain significant barriers to development of the Ring of Fire, including a physical infrastructure deficit, unclear timelines for Matawa-Ontario negotiations, and a lack of federal funding (McGuinty 2014).

ONTARIO'S MINING SUPPLY AND SERVICE SECTOR

While mining operations contribute significantly to the mining sector's role as an economic driver in Ontario, these activities do not fully capture the contributions of the entire sector. In reality, Ontario's mining sector is much more diverse than mineral production; indeed, a broad set of businesses based in Ontario provide a suite of goods and services to mining companies both in the province and abroad. Collectively, these businesses comprise Ontario's "mining supply and service" sector (MSS).

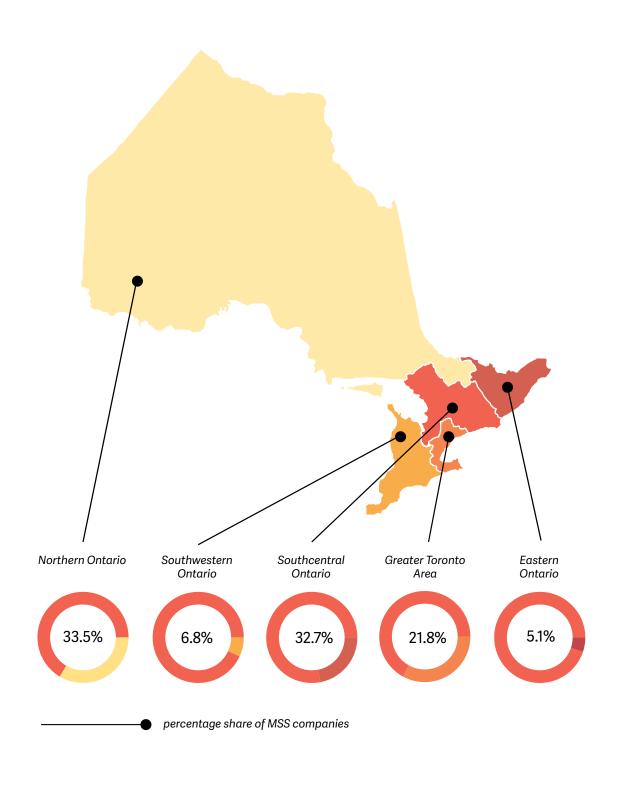
According to PwC (2014), the sector can be broken into three broad segments:

- Mining equipment, supplies, and service companies, such as mining equipment manufacturers, chemical manufacturers and providers, electronic/communications equipment manufacturers, and others.
- Mining contract service companies, such as engineering companies, construction and drilling companies, and those providing geophysical and testing solutions.
- Consulting services and related companies, such as consulting firms, financial services providers, and law, accounting, and other professional services firms.

The overall contribution of the MSS sector to Ontario's economy is substantial. In 2011, the sector consisted of over 900 companies who collectively contributed over \$6 billion to the province's GDP, employed over 68,000 people, and generated nearly \$1.5 billion in tax revenue for government (Ibid). For reference, this sector's GDP contribution was double that of the motion picture and sound recording industries. In addition, MSS companies did not simply provide their goods and services to domestic mining operations, as 70 percent of them reported exporting their goods and services outside of Canada (Ibid).

The MSS sector is also an important contributor to the province's regional economies, as MSS companies are distributed widely within Ontario. According to PwC (2014), of the 900 MSS companies present in the province, one-third were located in northern Ontario, while two-thirds were located in southern Ontario (see Figure 3 for a more detailed breakdown).

Figure 3 - Geographic distribution of the mining supply and service sector in Ontario



Source: PwC 2014

SUDBURY

Sudbury has a long history as a strong mineral producer stretching back over a century. In recent years, the city has taken steps to capitalize on this mining history and expertise to assert itself as a world renowned mining cluster with vast expertise in mining supply and services, education, and research and innovation. Greater Sudbury's mining supply and services sector employs approximately 14,000 people and contributes \$4 billion in annual economic activity (City of Greater Sudbury 2015). Sudbury is now home to a number of nation-leading mining research and innovation

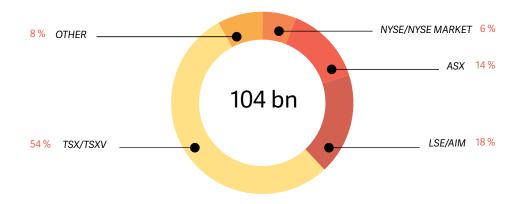
groups and initiatives, including the Centre for Excellence in Mining Innovation (CEMI), the Mining Innovation Rehabilitation and Applied Research Corporation (MIRARCO), the Northern Centre for Advanced Technology (NORCAT), and important mining programs at postsecondary institutions including those offered at the recently established Goodman School of Mines. Sudbury is also home to the Northern Ontario Mining Supply and Services Association (SAMSSA) which represents the interests of the largest concentration of expertise in mining supply/products and services from Northern Ontario.

TORONTO

Toronto plays a key role in the global mining landscape as the world's leading mining finance centre. As of October 1, 2015, the Toronto Stock Exchange (TSX) and the TSX Venture Exchange (TSX-V) were home to 51 percent of the world's public mining companies. As of December 31, 2014, there were 291 mining companies listed in the TSX, valued at \$229 billion, with \$7 billion in

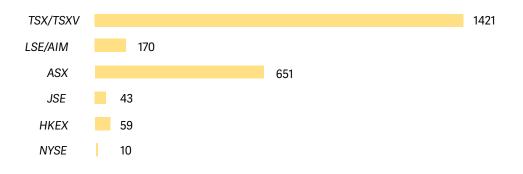
equity capital raised. On the TSX-V, there were 1,201 companies listed with a total value of \$9.3 billion, and \$1.9 billion in equity capital raised. From 2010-2014, both exchanges accounted for over half of global mining equity capital raised (Figure 4). Currently, there are over 1,400 mining issuers listed on these exchanges, more than double other global exchanges (Figure 5).

Figure 4 - Distribution of \$104 billion in mining equity capital raised, 2010-2014



Source: TMX Group

Figure 5: Number of mining issuers listed in the first half of 2015



Source: TMX Group

NORTHWESTERN ONTARIO

Mining activity is a significant contributor to the economy of northwestern Ontario. In 2013, mines in this region produced \$1.81 billion of metallic minerals (Thunder Bay CEDC 2015). A large proportion of that mineral product was gold: as of 2013, northwestern Ontario produced nearly 60 percent of Ontario's total gold production (Thunder Bay CEDC 2013). There are currently four operating mines (three gold mines and one palladium mine) in northwestern Ontario, and five new gold mines

forecast to be in production within the next four years. These projects will add over 1,500 direct jobs to the region. This mining activity is being supported by a growing network of mining supplies and services companies, and research at Lakehead University's Centre of Excellence for Sustainable Mining and Exploration.

In sum, the mining sector as a whole - both mining operations and MSS - plays an integral role as an economic driver of Ontario's economy. Arguably, it is one of a few sectors in which Ontario plays an outsized role on the international landscape: our history of mineral production has been successfully leveraged to build competencies in

production, mining finance, and other services.

That being said, the role of mining in Ontario's 21st century economy is not guaranteed. As described in the next section, the province's mining sector is facing some serious challenges.

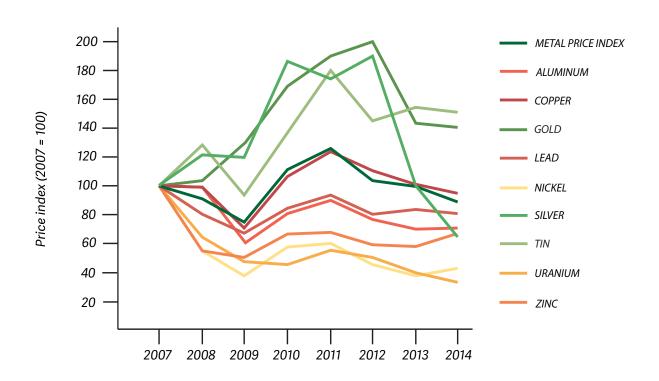
PREPARING ONTARIO MINING FOR LONG-TERM SUCCESS

It is no secret that, for the past few years, Ontario's mining sector has been experiencing some significant challenges. In some cases, these challenges are symptomatic of broader global trends. For example, because of the marketdriven nature of mineral pricing, persistent uncertainty in the global economy has taken a toll on the mining sector (MAC 2015a). The combination of slower economic growth from emerging economies and uncertainty in the

performance of advanced economies has created difficult market conditions for mineral products (MAC 2015a; PwC 2015b).

As demonstrated in Figure 6, these market conditions have resulted in both depressed and volatile commodity prices for many mineral products.

Figure 6: Relative price of mineral commodities, 2007-2014

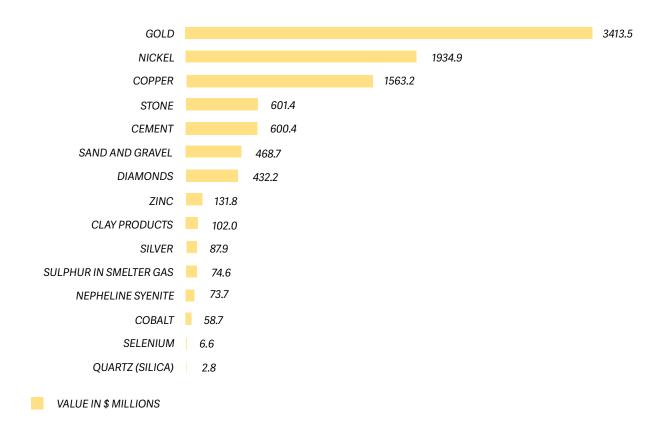


Source: PDAC 2015

In the context of Ontario's mineral production, which is dominated by gold, nickel, and copper (see Figure 7), the impact of commodity prices based on the trends displayed above appear mixed. In 2015, however, prices for many mineral commodities have reached new lows. For example, the price of copper reached a six-year low in November,

while in the same month nickel reached a ten-year low (CBC News 2015; De Sousa 2015). As a result, depressed and volatile commodity prices are significant considerations for Ontario-based companies.

Figure 7: Ontario mineral production* by mineral, 2014



Source: Natural Resources Canada

In addition, the global industry has been hit by a decline in access to capital (MAC 2015a; PwC 2015b). At the senior mine level (i.e. large producers), investors are losing confidence in the ability of miners to deliver adequate returns (PwC 2015b). As a result, the total value of new equity raised by the Top 40 mining companies has declined steadily since 2008 (Ibid).

At the junior level (i.e. smaller explorers), tough times have decreased the appetite for riskier investments; indeed, there has been a marked shift away from investment in exploration activities to discover new deposits and towards the more detailed definition of known deposits (MAC 2015a). For all juniors, however, equity is in short supply. In 2015, new equity financing for the top 100 junior miners decreased by 25 percent from 2014 levels. In addition, 86 percent of that new equity was raised by only 15 of those companies. The vast majority of companies raised less than \$1 million (PwC 2015a).

Ontario's mining community is currently struggling with these global realities. However, as mentioned earlier, the community is also facing additional, Ontario-specific challenges that are making it difficult for projects to get off the ground. The economic viability of new mines, and the finance and innovation clusters that mining operations foster, will depend on the province's ability to address Ontario-specific issues. As stated by the Mining Association of Canada, "decisions regarding regulatory, tax and mineral policy made now will significantly affect Canada's readiness to capitalize and benefit from these opportunities when they arrive" (MAC 2015a, pg. 11).

These challenges are the focus of the rest of this report. In the near term, the Governments of Ontario and Canada can make key decisions to prepare the province and its mining sector to take full advantage of an upswing in the global mining environment.

^{*} preliminary estimates

INFASTRUCTURE INVESTMENT

RECOMMENDATION 1: BOOST INVESTMENT IN NORTHERN INFRASTRUCTURE AND COORDINATE INFRASTRUCTURE PLANNING WITH MINING, ABORIGINAL, AND NORTHERN INTERESTS.

THE GOVERNMENT OF ONTARIO SHOULD BROADEN THE MANDATE OF THE RING OF FIRE INFRASTRUCTURE DEVELOPMENT CORPORATION TO SEEK OUT THESE OPPORTUNITIES.

Mining exploration and development requires access to essential transportation, communication, and energy infrastructure. According to the Conference Board of Canada, inadequate or non-existent infrastructure is one of the biggest obstacles to mineral development in northern Ontario (Rheaume and Caron-Vuotari 2013). Inadequate transportation infrastructure, including road and rail, has been a primary barrier to some of Ontario's most promising mineral discoveries, such as the Ring of Fire (Hjartarson et al. 2014).

The lack of infrastructure in Ontario's North is not exclusively an issue for the mining community. In the government's *Growth Plan for Northern Ontario, 2011*, infrastructure was identified as an essential building block of northern development (Government of Ontario 2011). For northern municipalities, adequate infrastructure is essential to compete for new investment (NOLUM 2013). It is also essential to boost the fortunes of Aboriginal communities in Ontario and improve on-reserve quality of life, as this region is home to 40 percent of the province's Aboriginal population and 106 of Ontario's 133 First Nations (Hjartarson et al. 2014). Many of these communities lack basic transportation, energy, water, and other essential infrastructure.

In recognition of this need, the government has taken steps to fund new infrastructure development in northern Ontario. As part of its \$130 billion in planned infrastructure investment, \$15 billion is earmarked for critical infrastructure projects outside of the GTHA over the next decade. It has also committed up to \$1 billion towards infrastructure development for the Ring of Fire, and provided funding to northern municipalities through other government funds.

That said, the election of a new federal government has broadened the window of opportunity for increased infrastructure investment to occur. At present, the Governments of Canada and Ontario have large infrastructure spending commitments of \$125 billion and \$130 billion, respectively. In the current low-interest rate environment, the cost of borrowing for this investment is much more attractive. There is a clear opportunity for

both the federal and provincial governments to build on commitments that have already been made.

In addition, the Government of Canada has committed to addressing issues faced by Aboriginal people in Canada. In his ministerial mandate letters, Prime Minister Trudeau writes that "it is time for a renewed, nation-to-nation relationship with Indigenous Peoples, based on recognition of rights, respect, co-operation, and partnership." Improving quality of life via access to essential infrastructure will be an important component of the federal government's commitment.

Finally, the mining community, as well as Aboriginal communities, believe that there is an opportunity for better coordination of infrastructure spending, to the benefit of northern development. Presently, opportunities to maximize the benefits of infrastructure development go unrealized due to a lack of coordination in the planning process. For example, there are a handful of development opportunities in the Geraldton region that are moving ahead with self-generation options due to both the high costs of electricity grid connection and the absence of a firm plan to enhance grid capacity. By not aligning these development projects with grid enhancements, Ontario is missing a clear opportunity to multiply their benefits by strengthening infrastructure in the region.

To support northern development and prepare Ontario to take advantage of future mineral development opportunities, the Governments of Ontario and Canada should boost investment in northern infrastructure. In doing so, they should align the infrastructure needs of northern and Aboriginal communities, mining developments, and other economic development projects.

To coordinate these investments, the Government of Ontario should expand the mandate of the Ring of Fire Infrastructure Development Corporation to connect mineral exploration and development projects, including but not limited to the Ring of Fire, with broader economic development opportunities. In addition, it should ensure that the Corporation's Board of Directors, once expanded, includes industry and Aboriginal representatives.

REGULATORY ENVIRONMENT

As a relatively high-cost jurisdiction, an important competitive feature of Ontario's regulatory environment should be certainty, or a low level of regulatory risk. That is, to compete at a global level, Ontario must lower its investment risk by creating a regulatory environment that is transparent, clear, and efficient.

For the mining community, it is especially important to offset the high and rising cost of electricity in the province. In Empowering Ontario, a recent OCC report, it was noted that industrial electricity rates have increased by 16 percent over the past few years and will continue to rise for the foreseeable future. These price increases have particularly impacted the mining sector, as certain mining activities, such as smelting, are very energy-intensive. The Government of Ontario's recent decision to make permanent the Northern Industrial Electricity Rate (NIER) Program, which provides rebates to northern Ontario's large industrial electricity consumers, acknowledges that this is a significant challenge for industry and was supported by the sector. Even with the NIER, rates in the province continue to increase rapidly. More innovative actions like this are needed to reduce the impact of Ontario's rising electricity rates, which remain a disincentive to further investment.

In addition, when it comes to mining in Ontario, the province has not yet achieved an environment of low

regulatory risk. Regulatory uncertainty is consistently cited as a top issue by current and prospective exploration and development companies, particularly in their obligations surrounding Aboriginal consultation. Respectful and mutually beneficial relationships with Aboriginal communities are essential to the mining industry, but many companies feel that there is insufficient clarity regarding the specific obligations of the company, Aboriginal communities, and the government in this process. As a result, when a company begins consultations for a specific development, it is very difficult to predict when they will end.

This lack of certainty comes back to hurt the sector, as mining companies seeking to operate in Ontario are unable to guarantee predictable returns on investment. In an unstable economic environment, regulatory uncertainty makes it that much more difficult for Ontario miners to access capital.

Importantly, this uncertainty has not prevented the successful negotiation of agreements between mining companies and Aboriginal communities; indeed, there are nearly 75 successful examples of negotiated agreements in Ontario that are yielding significant benefits for all parties involved.

ONTARIO'S MUSSELWHITE MINE AND THE MUSSELWHITE AGREEMENT

Musselwhite Mine was one of the first mine developments in Ontario to include a comprehensive agreement with local Aboriginal communities. The 'Musselwhite Agreement' was originally signed in 1996, with the First Nations of North Caribou Lake, Cat Lake, Kingfisher Lake and Wunnumin Lake, as well as the Shibogama First Nations Council, the Windigo First Nations Council, and the federal and provincial governments. In 2001, the Agreement was renewed by the same parties without government representation. Beyond providing compensation and revenue sharing based on mine production,

the Agreement outlines education, training, employment and business-related services to be provided and facilitated by Goldcorp. As of the date of publication, roughly 10 percent of Musselwhite's employment come from signatory or affiliate communities to the Agreement and more than 20 percent from First Nations. Three public liaison committees were formed under the agreement to report on mine progress, receive community feedback and hear concerns directly from local citizens on environmental, social and economic matters.

ONTARIO'S DETOUR LAKE MINE

Detour Gold owns and operates the new Detour Lake mine in northern Ontario. Detour's success in opening the mine, and pouring its first gold bar in 2013, is in part related to an extensive Aboriginal consultation program. This program included capacity funding for three First Nations (Moose Cree, Taykwa Tagamou, and Wahgoshig First Nations) and the Métis Nation of Ontario to study and identify their interests, positions, and concerns respecting the mine's feasibility, potential financial returns, and environmental assessment

documentation. From an informed position, the parties were able to successfully negotiate Impact Benefit Agreements (IBAs) to formalize economic, environmental protection measures and community benefits. Since gaining regulatory approvals to open the mine, Detour Gold and these communities have continued their engagement, including formalizing regional environmental management and monitoring initiatives, and set important precedents in Ontario.

Recent steps taken by the Government of Ontario to improve relations with First Nations in the province are positive. For example, in August 2015, Premier Wynne signed a Political Accord with the Chiefs of Ontario, creating a formal bilateral relationship between the two parties and obligating bi-annual meetings to discuss shared priorities (Government of Ontario 2015). In establishing a formalized forum to address critical First

Nations issues, this Accord will make strides in reducing uncertainty in the consultation process.

However, the situation requires much more clarity. Governments can provide this clarity in two ways.

RECOMMENDATION 2: PROVIDE A SINGLE LIST INDICATING WHICH ABORIGINAL COMMUNITIES A MINING COMPANY NEEDS TO CONSULT WHEN PURSUING THE DEVELOPMENT OF A PARTICULAR PROJECT.

Government is uniquely placed to substantiate aboriginal and treaty rights. Doing so in an accurate and timely fashion provides business with greater certainty and clarity over the process to permit and construct a mine.

In the current regulatory environment, companies can find it difficult to understand which communities they should be consulting. One reason for this confusion is an inconsistency across ministries. On some occasions, companies in Ontario have been presented a consultation list by Northern Development and Mines, only to be given a different list by Natural Resources. In these cases, there is a clear lack of ministerial coordination.

Another reason for this confusion is inconsistency over time. Sometimes, as a company progresses through the consultation process, additional communities are added to the list with no clear justification.

As such, governments must provide prospective companies with a single list that is used consistently by the various government ministries that interface with Aboriginal communities. The list should indicate which communities a company is required to consult and why the listed communities are owed consultation duty by the Crown. The list should only be revised if new and credible information is obtained by the Crown that is satisfactory to change its initial assessment.

RECOMMENDATION 3: DEVELOP AND IMPLEMENT A RESOURCE REVENUE SHARING (RRS) FRAMEWORK TO ALLOW ABORIGINAL COMMUNITIES TO DERIVE CLEAR BENEFITS FROM RESOURCE DEVELOPMENT PROJECTS IN ONTARIO.

In Ontario, and across Canada, government policy has been largely absent in clarifying obligations surrounding resource development and resource sharing. Increasingly, court decisions are being used as the main instrument to solve uncertainty and conflict related to development projects. This does not provide a strong foundation for responsible and sustainable resource development that is inclusive of Aboriginals in Canada.

Clearly, a change in direction is required. The mining community needs government to proactively develop policy that addresses its responsibility for accommodating aboriginal and treaty rights. A number of groups, including the Ontario Mining Association, are pushing for the development of a framework for sharing benefits of resource development based on the strength of claims of any First Nation impacted by these projects.

The current duty to consult framework is designed to make clear the impacts of resource development projects to affected Aboriginal communities. However, the delineation

of community benefits is currently outside of the scope of this framework, and so industry is often left to address this issue on their own. The sharing of existing mining tax revenues between the Crown and Aboriginal communities is one way to provide certainty that Aboriginal people will gain from the development of mineral resources, and to align interests to ensure that the province, industry, and communities all benefit.

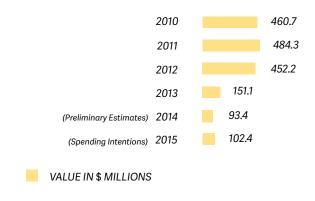
The development of an RRS framework does not replace the need for community-industry partnerships. In Ontario, negotiated agreements between industry and Aboriginal communities, or Impact and Benefit Agreements (IBAs), have been successful tools for outlining project impacts, the responsibilities of different parties, and how communities will share in the benefits of specific development. IBAs will continue to play a role in future resource development projects in the province.

ACCESS TO CAPITAL

The challenges facing the mining sector both in Ontario and globally have especially impacted exploration activity in the province. As noted earlier, the ability of junior miners to raise capital has declined considerably over the past few years. In Ontario, this has translated into a considerable

decline in exploration activity. As seen in Figure 8, exploration expenditures by junior mining companies in Ontario has declined significantly since 2010, from a peak of nearly \$490 million in 2011 to a predicted \$100 million in 2015.

Figure 8: Exploration plus deposit appraisal expenditures of junior companies in Ontario, 2010-2015



Source: Natural Resources Canada

This decline in exploration spending is worrisome for the long-term fortunes of mining in Ontario. According to MAC (2015b), reserves of several important base metals have been declining in Canada since the 1980's, while production volumes of key commodities have also been declining. While there are some significant known mineral deposits in Ontario, sustaining the mining sector as a key contributor to Ontario's economy will require even more

discoveries. Increasingly, those discoveries will need to happen in relatively underexplored remote regions of the province, which can be much more expensive than nonremote exploration projects (Ibid).

Both the Governments of Ontario and Canada can take steps to increase access to capital for exploration companies and support exploration activity.

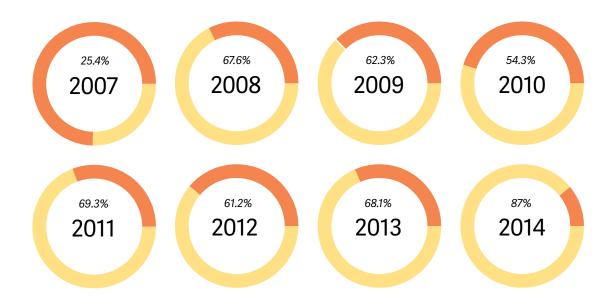
RECOMMENDATION 4: INCREASE THE ONTARIO FOCUSED FLOW-THROUGH SHARE TAX CREDIT FROM FIVE PERCENT TO 20 PERCENT TO BRING IT IN LINE WITH OTHER PROVINCES.

In the short-term, changes to the flow-through share tax credit regime in Ontario could help to sustain and even increase exploration activity in the province.

Flow-through shares are a financing mechanism that help junior exploration firms raise capital to fund their exploration activities. By issuing flow-through shares, these companies are able to pass on their exploration expenses to investors. In doing so, companies also pass on the tax benefits associated with exploration activities, which investors can deduct against their own income.

The flow-through share regime has played an important role in helping junior miners to raise capital, particularly during the recent downturn in overall financing activities. As seen in Figure 9, the share of financing raised by the flow-through share regime has increased considerably since 2007, from 25.4 percent to 87 percent in 2014. According to PDAC (2015), this increase highlights the important incentive that flow-through shares provide to raise capital during riskier stages of the mining cycle.

Figure 9: Share of exploration financing raised through flow-through share regime by issuers listed on Canadian exchanges, 2007-2014

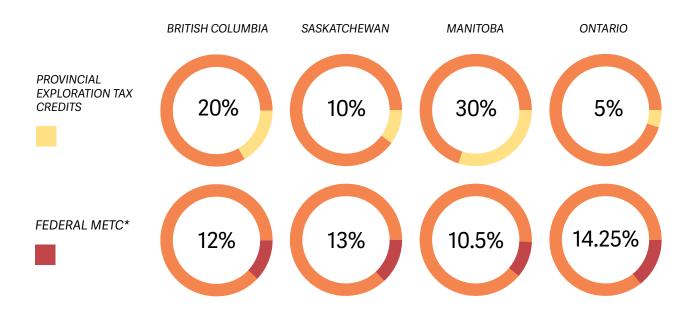


Source: PDAC 2015

In recent years, the attractiveness of flow-through shares has been enhanced by additional tax credits offered by the federal government and certain provincial governments, which are ultimately passed on to the investor through the flow-through share regime. The federal government currently offers a Mineral Exploration Tax Credit (METC) of 15 percent, which means that flow-through share

investors are eligible for an additional tax break. Provincial governments also offer various levels of exploration tax credits on top of the federal METC to incentivize more investment. The relative tax benefits for investors in each province is shown in Figure 10.

Figure 10: Provincial and federal mineral exploration tax credits for select jurisdictions



Compared to other provinces, the relative benefit for investors in Ontario is relatively small. This limits the ability of junior exploration companies operating in the province to access this potential pool of capital. To incentivize an increase in exploration activity in the province and bring Ontario in line with other important mining provinces, the Government of Ontario should increase its flow-through share tax credit to 20 percent.

Preliminary analyses suggest that the relative cost to the provincial treasury is small relative to the potential benefit. Under an enhanced tax credit, each additional \$1,000 of exploration expenditures via flow-through shares would cost the province \$134. The benefits of enhanced exploration would be realized in terms of increased economic activity resulting from more exploration activity as well as the increased potential for the discovery of new deposits.

^{*}Federal METC is reduced by the proportion of the provincial credit

RECOMMENDATION 5: EXTEND THE AVAILABILITY OF THE FEDERAL MINERAL EXPLORATION TAX CREDIT (METC) FOR THREE YEARS AND CREATE AN ENHANCED METC FOR REMOTE PROJECTS.

As described above, Canada's flow-through share regime has played a critical role in supporting mining exploration activity as other sources of investment have declined. By offering a 15 percent tax credit to flow-through share investors, the METC provides an important incentive for increased investment in Canadian exploration activities.

The METC is not a new government incentive. The tax credit was originally introduced in 2000 for a three-year period and has continued to be extended annually by successive federal governments since that time (Natural Resources Canada 2015). Earlier this year, the previous federal government announced its intention to extend the METC to March 31, 2016 (Government of Canada 2015). Given its important role in helping to incentivize

investment in exploration during this difficult period for the mining sector, Ontario's mining community urges the Government of Canada to maintain the previous government's commitment to extend the METC. To provide certainty to the investor community, the federal government should extend the METC for a three-year period instead of the typical one-year period, after which it can evaluate the need for this investment incentive.

Further, it should accept the advice of PDAC, MAC, and other organizations to create an enhanced METC of 25 percent for exploration projects in remote and northern parts of Canada, which are two to three times more expensive than non-remote projects, on average (MAC 2015b).

PROVINCIAL MINING TAX RATES

RECOMMENDATION 6: COMMIT TO MAINTAINING CURRENT PROVINCIAL MINING TAX RATES FOR REMOTE, NON-REMOTE, AND DIAMOND MINING OPERATIONS.

In its 2012 and 2013 budgets, the Government of Ontario indicated its intent to re-examine its mining tax regime. This would mean revisiting Ontario's Mining Tax Act, which dictates a five percent tax rate on profits from remote mines, and a 10 percent tax rate on profits from non-remote mines. The province's sole diamond mine is subject to a separate 13 percent rate through the Ontario Diamonds Royalty, which is contained within the Ontario Mining Act. Mining firms are subject to these sector-specific taxes in addition to the taxes paid by any firm operating in Ontario, including corporate tax, sales tax, income tax, and payroll taxes.

As stated earlier in this report, the mining sector in Ontario is facing considerable challenges due to both global and local factors. A heavier tax burden for the sector at this time would not help in setting mining in Ontario up for long-term success.

As such, the mining community appreciates the removal of the intent to re-examine the mining tax regime from more recent budgets and urges the Government of Ontario to maintain this position going forward.

RESEARCH AND INNOVATION

RECOMMENDATION 7: INCREASE ONTARIO'S INVESTMENT IN MINING RESEARCH AND INNOVATION FOR THREE YEARS TO SUSTAIN MINING INNOVATION ACTIVITY IN THE PROVINCE THROUGH THE DOWNTURN.

Innovation is a critical component of a viable and growing mining sector in Ontario. With increasing global competition from lower-cost jurisdictions, the development of new technologies, products, and business processes is becoming increasingly necessary for Ontario firms to stay competitive (CCC 2013).

At the same time, many of Ontario's long-lived mines are very deep and the technical challenges presented by these mines, including reduced rock stability and high-heat conditions, demand new technologies. Developing innovative solutions to these challenges will be crucial to the future of Ontario's existing mines, and generate expertise that can be exported globally.

Fortunately, Ontario benefits from a diverse network of mining research, development, and innovation organizations that bring together mining companies, suppliers, colleges and universities, government, and non-profits (Ibid). This whole-of-industry approach to research, development, and commercialization helps to reduce risk in fluctuating market conditions (Ibid).

With the downturn in the global mining sector fuelling the development of fewer projects, there is an opportunity for the industry to shift its focus towards innovation and develop the technologies that will increase the productivity of their operations. Committing resources to these projects in Ontario will ensure that the province's mining community is best positioned to take advantage of the next upswing in the mining cycle. Unfortunately, as described earlier, mining firms are currently scaling back investment to focus on core operating priorities. As a result, fewer resources are available in the private sector to fund mining innovation, at exactly the time where these

funds could have the greatest impact in terms of future gains for the sector.

This is where government investment can play a critical role. Currently, direct government funding for research and innovation is provided to match investments by industry at a one-to-one ratio. Matching investments are provided regardless of the type of project. With fewer resources available from industry, this skews investments towards cheaper and lower-risk research projects, and away from the innovation and commercialization projects that are necessary to realize productivity gains in the sector.

As such, the mining community urges government to temporarily increase its funding for mining innovation projects in Ontario. Specifically, it should increase the relative government-to-industry ratio for innovation and commercialization projects to incentivize greater industry investment in these higher risk projects and boost productivity-enhancing activity in Ontario during this downturn in the mining cycle. There may again be an opportunity to work in concert with the federal government, which has indicated a desire to increase the adoption of sustainability technologies and processes in resource sectors.

After three years of extended funding, the government should re-evaluate whether the increased funding ratios are appropriate given the state of the global mining sector.

MEASURING COMPETITIVENESS

RECOMMENDATION 8: CONDUCT OR COMMISSION A BENCHMARKING STUDY TO BETTER UNDERSTAND ONTARIO'S CURRENT ATTRACTIVENESS AS A MINING JURISDICTION RELATIVE TO ITS COMPETITORS.

To better understand what steps the Government of Ontario as well as industry can take to position the province for long-term success in mining, the province needs a much clearer picture of the present investment climate.

Currently, there are few indicators that the government can reference to understand Ontario's standing in the global mining landscape. A clear understanding of the specific differences between jurisdictions is necessary to inform public policy decisions.

A benchmarking study would provide a clearer picture of the differences between Ontario and other jurisdictions, and where there is room for improvement. Specifically, this benchmarking study should measure the status of comparator jurisdictions across the set of criteria that mining companies use to make investment decisions. These criteria include: certainty of laws/regulatory certainty (e.g. permitting times), taxes, input costs (e.g. electricity prices), infrastructure, and geology.

As such, the Government of Ontario should undertake or commission an analysis to benchmark Ontario relative to other jurisdictions, based on the criteria identified above. At a minimum, the government must become more aware of how Ontario is performing relative to its peer jurisdictions in the critical factors identified above.

LEVERAGING GLOBAL NETWORKS

RECOMMENDATION 9: LEVERAGE THE DEMAND FOR ONTARIO MINING EXPERTISE TO DRIVE GROWTH. AS A START, GOVERNMENT AND INDUSTRY SHOULD COLLABORATE TO CREATE NEW BUSINESS OPPORTUNITIES VIA THE INDUSTRY'S GLOBAL NETWORKS.

As demonstrated earlier in this report, Ontario plays a large role in Canada's reputation as a strong mining jurisdiction. It also plays a critical role on the global stage, as Canada's mining sector is highly integrated into the global economy (CCC 2013).

Within the global mining sector, Ontario has a strong reputation as a leading and globally differentiated mining jurisdiction. Mining operators from around the world come to mine sites in Timmins, Sudbury, and other locations to observe and learn from our innovative mining practices. Likewise, Ontario mining professionals travel extensively to advise international companies on their mining operations.

With a coordinated effort, the demand for Ontario mining expertise could be leveraged to drive economic growth and expand export opportunities for the province.

However, Ontario's reputation as a strong mining jurisdiction is not widely recognized outside of the sector. In a recent public opinion survey by the Ontario Mining Association (OMA), while nearly three-quarters of respondents had a favourable impression of the sector in Ontario, 68 percent of respondents agreed that Ontario should do more to promote mining.

The Government of Ontario and industry players must do more to exploit this competitive advantage. This requires a coordinated approach. As a start, government and industry should work together to leverage the industry's global networks to identify new business opportunities for the province.

CONCLUSION

From the rising costs of inputs to growing regulatory uncertainty, Ontario's mining community is feeling pressed. In this report, we have outlined a series of steps that will set Ontario's mining sector up for success in the future. These include a coordinated effort by the provincial and federal governments to boost infrastructure investment in the North, reducing regulatory uncertainty via the development of an RRS framework for Aboriginal communities, and increasing access to capital by increasing exploration tax credits.

Despite the number of challenges that mining currently faces at a global level, there exists the potential for the sector to have a bright future in Ontario. Even in these difficult times, Ontario remains the global centre of mining finance, and its strength as a source of mining innovation

continues to grow. The prospects for sustained mineral production in the province are also encouraging.

Recent developments at the provincial and federal levels suggest that there is a clear window of opportunity to get this right. We encourage the Government of Ontario to continue to engage with all actors in the mining sector to capitalize fully on the next mining boom.

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