





Note to the reader

This report presents a comprehensive view of mining activity related to metals (iron and titanium, gold, nickel, platinum group metals and cobalt, copper, zinc, niobium and tantalum, lithium, and rare earths). It also examines graphite, apatite and diamonds. However, mining operations related to certain industrial minerals, i.e. feldspar, mica, salt and silica, **are not included**.

For each metal or mineral substance examined in the report, a table presents information on mineral reserves and mineral resources of mines and mining projects that have at least reached the preliminary economic assessment stage.

For each metal or mineral substance presented, a map indicates the location of active mines and mining projects.

Unless otherwise indicated, all amounts are in Canadian dollars.

The information that the report presents dates from May 2017, unless otherwise indicated.

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Mathieu Dupuis, Photographer

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A WORD FROM THE MINISTER OF ENERGY AND NATURAL RESOURCES AND MINISTER RESPONSIBLE FOR THE PLAN NORD PIERRE ARCAND

Rich in excellent mineral potential, exceptional geological knowledge and access to a skilled workforce, Québec is one of the most attractive territories in the world in mining development. Mining investments in Québec have increased to 2.56 billion dollars in the past year.

The efforts taken by our government to support this sector have borne fruit. Among other things, it has set clear guidelines to secure Québec's place as a leader in modern and responsible development: *The Strategic Vision for Mining Development in Québec* provides measures to enhance existing mining sectors and to develop new ones, to prevent and mitigate the impact on the environment and to foster citizen participation and transparency.

The resurgence of exploration and mining will bode very well for Québec's mining industry in the coming years. Just as we committed to doing so, our government created a stable and predictable business environment for investments.

All these measures we have put in place tie in closely with those set out in the Plan Nord program, an ambitious project intended to fully exploit the potential of this our vast Northern Territory.

As you can see, Québec offers more benefits than ever before in mining development. Happy reading!

Pierre Arcand

Minister of Energy and Natural Resources Minister responsible for the Plan Nord



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QUÉBEC'S MINING SECTOR

Québec is Canada's biggest province. It has an area of 1.7 million km² and a population of 8.3 million. It is strategically located northeast of the United States near major population pools and large-scale industries and its deep-water ports afford it ready access to Europe and Asia.

It accounts for one-fifth of Canadian mining output. Québec produces and develops 15 metals and 13 nonmetallic minerals, the most diversified production in Canada. Such diversification will broaden with the advent of new lithium, rare earths and apatite mining projects.

Québec has significant potential to renew mineral reserves of substances already being mined and to extract new metals and mineral substances that will be sought in the coming years.

Québec also draws on its collaboration with associations representing the mining sector and with the communities that host projects. The associations and communities are natural partners that work with the government to agree on mechanisms to develop the mining sector and broaden its influence in a spirit of respect for the principles of sustainable development.

Moreover, the findings of the latest Fraser Institute¹ survey confirm mining investors' interest in Québec, which ranks sixth worldwide among the most attractive regions according to the mining exploration and operation companies questioned.

Québec's corporate taxation system is competitive² and the regulatory framework is stable and adapted to the sector. Investors can benefit from numerous advantages by doing business in Québec.

To promote mining activity in Québec, the Québec government announced in the 2017-2018 Québec Economic Plan³ a reduction in the tax burden of companies overall totalling more than \$1.3 billion. Furthermore, it announced:

- the harmonization of the definition of the northern zone with that of the territory that the Plan Nord covers⁴ for the purposes of the tax credit relating to resources and the mining tax regime. This measure seeks to support the development of new mining projects in the territory that the Plan Nord covers. Accordingly, the enhanced rates of the tax credit relating to resources apply from now on to the entire territory that the Plan Nord covers. What is more, the two allowances designed to encourage mining development in northern Québec in the mining tax regime are:
 - » the exploration allowance that increases by 25% the exploration expenses incurred in the territory that the Plan Nord covers;
 - » the additional allowance for a mine located in the territory that the Plan Nord covers designed to take into account the high costs stemming from the start-up of production in a mine located in the northern territory;
- the implementation of an allowance under the mining tax regime for the consultation of communities, including the Aboriginal communities, in mining project delivery. This measure will allow mining companies to deduct a portion of such expenses.

¹ www.fraserinstitute.org/categories/mining.

² www.investquebec.com/international/fr/pourquoi-le-quebec/incitatifs-fiscaux.html.

³ www.budget.finances.gouv.qc.ca/budget/2017-2018/fr/documents/PlanEconomique_Mars2017.pdf#page=69

The territory that the Plan Nord covers encompasses all of Québec's territory north of the 49th degree north latitude and north of the St. Lawrence River and the Gulf of St. Lawrence.

THE STRATEGIC VISION FOR MINING DEVELOPMENT IN QUÉBEC⁵

The Strategic Vision for Mining Development in Québec (Strategic Vision) is mobilizing all stakeholders wishing to promote the mining industry in order to create a business environment conducive to the industry's development. It defines three key strategic thrusts according to the principles of sustainable development:

- develop existing and new mining industries;
- prevent and mitigate environmental impacts;
- promote citizen involvement and transparency.

The Strategic Vision is aligned with other government policies, including the Plan Nord.

The first key strategic thrust encompasses economic development measures aimed at mineral exploration and mining operations, primary metal manufacturing and the network of suppliers and equipment manufacturers. The main commitments pertaining to mineral exploration are of a fiscal nature. The government acted upon several of them in the 2016-2017 and 2017-2018 Budget Speeches. The Plan Nord includes most of the government's commitments to mine operators. The Québec government's financial support, through the Capital Mines Hydrocarbures fund managed by Ressources Québec, in particular, is a key factor in the development of the mining industry.

To accelerate the processing of the authorizations required to launch a mining project, the Strategic Vision stipulates that the Ministère de l'Énergie et des Ressources naturelles (MERN), the Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC) and the Ministère des Forêts, de la Faune et des Parcs (MFFP) will establish a single gateway to coordinate the issuance of licences. Moreover, it contains measures to satisfy the manpower and training needs of local and Aboriginal communities in the mining sector.

The MERN has also adopted a normative framework to establish the new Mining Research and Innovation Support Program, which will facilitate better planning of research grants by directly funding companies' research projects.

In the realm of primary metal manufacturing, the Ministère de l'Économie, de la Science et de l'Innovation (MESI) has undertaken to develop mineral processing R/D offerings in respect of processes in Québec. Consequently, companies will very soon have access to equipment and facilities, services and technical knowledge from a hydrometallurgical research centre, which will allow them to optimize their processes, better control their location costs and reassure potential investors about the performance of their new hydrometallurgical processes.

Various initiatives are planned to enable equipment manufacturers to better respond to prime contractors' needs and to penetrate external markets. Furthermore, several initiatives in Québec's 2016-2020 Export Strategy, unveiled by Export Québec in fall 2016, target suppliers and equipment manufacturers in the mining sector.

The second key strategic thrust of the Strategic Vision focuses on the environment. By way of an example, in the 2016-2017 Budget Speech, the Minister of Finance of Québec announced the Québec government's commitment to reduce by 80% by 2022 environmental liabilities in the mining sector.

The third strategic thrust of the Strategic Vision examines the social dimension. The social acceptability of mining projects is undoubtedly one of the fundamental challenges facing the mining industry and several initiatives are planned in this respect. Accordingly, the MERN is funding the final phase of the elaboration, under the aegis of the Quebec Mineral Exploration Association (QMEA), of sustainable development certification in Québec's mineral exploration sector. Furthermore, the MERN will collaborate in government efforts to promote the hiring of local manpower on the worksites of major mining projects.

THE PLAN NORD6

The Plan Nord is intended to develop the mineral, forest, energy, social, cultural and tourism potential of Québec's territory located north of the 49th parallel. By harmonizing the economic, social and environmental facets on which the Plan Nord hinges, the Québec government wishes to make it a reference in the realm of responsible, sustainable northern development and a unifying project for Québec society.

What is more, the Plan Nord makes provision for the establishment of a context conducive to mining development by relying on the diversity of resources. Indeed, the territory that the Plan Nord covers has varied mineral resource potential, including nickel, cobalt, platinum, zinc, iron, ilmenite, gold, apatite, diamonds, lithium, vanadium, rare earths and graphite.

It plans to facilitate access to the territory by road, rail, sea or air. It also calls for the enhancement of telecommunications infrastructure and the supplying of clean energy in the northern territory, as well as supporting scientific knowledge development in the vast territory.

The Société du Plan Nord is implementing the plan. It is contributing to the planning and integrated, coherent development of the territory that the Plan Nord covers, in collaboration with several Québec government departments and bodies, representatives of the regions, the Aboriginal nations concerned, and the private sector. The Société du Plan Nord maintains regional service points and has advisors in Québec City. It is playing a key support role among the communities and organizations that have projects in the territory. Through its Business Development Office, it also offers businesses support to market their products and services by promoting links between them and prime contractors and support for investors.

ENERGY POLICY⁷

Québec is a major producer of electricity, 99% of it from renewable sources. It ranks fourth in the world as regards hydroelectric power generation.

Investors have access to green, renewable energy over a vast portion of the territory through a reliable distribution network. Companies can also benefit, depending on their consumption, from highly competitive energy costs.

The 2030 Energy Policy: Energy in Québec, A Source of Growth puts forward energy-related priorities, which are beneficial for the mining sector, in particular to:

- ensure competitively priced liquefied natural gas supplies to enhance the profitability of mines, reduce their greenhouse gas emissions and attract new investments;
- ensure electricity supply under competitive conditions for mining development;
- support projects to convert electricity generation using fossil fuels to renewable energy sources.

INFRASTRUCTURE

A vast network of road⁸, rail⁹, port¹⁰ and airport^{11 12 13} infrastructure serves Québec's territory (see Map 1). Québec has several deep-water ports, including the Port of Sept-Îles, North America's biggest ore port, which has a rail link to the Labrador Trough. One of the Québec government's priorities is to pursue the development of access to the vast territory that the Plan Nord covers¹⁴ by means of road, rail, maritime and air infrastructure and the supplying of hydroelectricity and natural gas.

- 6 www.plannord.gouv.qc.ca.
- 7 www.politiqueenergetique.gouv.qc.ca.
- 8 transports.atlas.gouv.qc.ca/Marchandises/MarchRestrictionsCamionnage.asp.
- 9 www.donneesquebec.ca/recherche/fr/dataset/reseau-ferroviaire.
- 10 www.transports.gouv.qc.ca/fr/entreprises-partenaires/entreprises-services-transport-maritime/Pages/portrait-quebec.aspx
- 11 adressesquebec.gouv.qc.ca/aqreseauPlus.asp.
- $12 \hspace{0.5cm} www.transports.gouv.qc.ca/fr/projets-infrastructures/structures-infrastructures/infrastructures-aeroportuaires/Pages/infrastructures-aeroportuaires.aspx.$
- 13 www.investquebec.com/international/fr/pourquoi-le-quebec/incitatifs-fiscaux.html.
- 14 The territory located north of the 49th parallel, illustrated on Map 1.

KNOWLEDGE MANAGEMENT AND MINING RIGHTS

The acquisition of new geoscientific knowledge on the territory overall is a key factor in mining development in Québec. With this in mind, the Québec government has, in recent years, invested \$15 million per year in the acquisition, processing and dissemination of geological data.

Québec has established the Système d'information géominière du Québec (SIGÉOM),¹⁵ which contains geoscientific information that the mining industry and the MERN have collected for over a century. A Web portal equipped with an interactive map provides access to the geoscientific database, deemed to be one of the most comprehensive in the world.

In Québec, the management of mineral titles is computerized and accessible on the Internet through the GESTIM Plus application. ¹⁶ The system offers real-time access to updated data in the public register of real and immovable mining rights. It makes it possible to designate claims on maps, renew them and pay the requisite fees in a secure online environment.

INNOVATION

To foster competitiveness in the Québec mining sector, the Québec government has adopted initiatives to support innovation as well as research and development.

The research priorities supported include underground exploration and exploitation, mining development in the North, energy conservation and greenhouse gases, the impact of mining development on communities and the environment, and the development and optimization of geomatics tools.

Since 2013, the MERN has invested \$16.5 million over five years in the Programme de recherche en partenariat sur le développement durable du secteur minier adopted by the Fonds de recherche du Québec — Nature et Technologies (FRQNT). The program is intended for university and college researchers. The mining industry must contribute at least 10% of project costs.

The Mining Research and Innovation Support Program, a new program open directly to mining ventures, has also been launched. This grant program provides financial contributions to help fund research projects carried out with the universities and recognized research organizations

To support the development of metal ore processing through hydrometallurgical processes, the Québec government has granted \$5 million in additional funding to MESI over three years (2016-2017 to 2018-2019).

The CONSOREM, a mineral exploration research consortium, the COREM, a mineral ore processing consortium, and the MISA Group (Mines, Innovations, Solutions, Applications), a network of experts working actively to advance innovative equipment and services for the entire array of mining operations, from exploration to rehabilitation, have also obtained financial support.

MANPOWER

The quality of the Québec labour force is recognized the world over. Québec is a longstanding mining producer that has experienced workers in all regions and specialized suppliers in the mining sector, both from the standpoint of mineral exploration, mining operations and mine site rehabilitation. Nearly 30 000 people work directly or indirectly in the sector.¹⁷

Several leading educational institutions satisfy manpower training needs in the mining sector, including the Institut national des mines, whose mission is to support the Québec government in exercising its responsibility in the realm of education in the mining sector.¹⁸

¹⁵ sigeom.mrn.gouv.qc.ca.

¹⁶ gestim.mines.gouv.qc.ca.

¹⁷ This includes mining extraction activities and support for mining and certain processing operations pertaining, for example, to zinc, copper, cement, clay and lime.

¹⁸ www.inmq.gouv.qc.ca.

Quebec-Newfounland-and-Labrador border (this border is not final)

SOCIAL ACCEPTABILITY

Québec encourages the establishment of a climate of collaboration between mining sector stakeholders and local and Aboriginal communities where mining activity takes place. In this context, on January 24, 2017 the MERN unveiled the document entitled *Orientations du ministère de l'Énergie et des Ressources naturelles en matière d'acceptabilité sociale*, ¹⁹ which sets out five key directions:

- better publicize the MERN's roles and responsibilities with respect to planning and management
 of the territory;
- make more transparent and participatory the mechanisms respecting planning and the reconciliation of uses in land use plans for the domain of the State, and update them;
- ensure the implementation of predictable public participation processes at all stages of the project;
- foster the sharing of the profits from energy and mining development projects with the host communities; and
- bolster the MERN's analysis capacity respecting the impacts, economic spinoff and repercussions of projects by ensuring recognition of social acceptability factors.

The implementation of the key directions calls, in particular, for ensuring the availability of a project manager in the regional offices to enable promoters and local stakeholders to obtain information on and discuss projects, broaden their understanding of the issues at stake, and possibly better reconcile uses.

What is more, Québec has already concluded treaties with the Cree, Inuit and Naskapi Aboriginal nations, covering an area of nearly 1.1 million km². In this territory, Aboriginal peoples' rights have been clarified and the processes governing the relationships between the parties have been fully defined.

To foster the reconciliation of uses, the Québec government also unveiled in January 2017 a land-use planning key direction pertaining to mining activity entitled *Pour assurer une cohabitation harmonieuse de l'activité minière avec les autres utilisations du territoire.*²⁰ The regional county municipalities (RCMs) can thus delimit territories that are incompatible with mining activity. This new government policy direction will, therefore, protect activities whose viability could be compromised by the impacts of mining activity and promote mineral resource development.

THE LEGAL FRAMEWORK

Several statutes regulate mining activity, in particular the *Mining Act* (CQLR, chapter M-13.1), the *Mining Tax Act* (CQLR, chapter, I-0.4), and the *Act respecting transparency measures in the mining, oil and gas industries* (CQLR, chapter M-11.5).

Mineral substances in Québec's territory usually belong to the State, with some exceptions. Anyone can obtain an exclusive exploration right (claim) on land that the person indicates on a map provided that the request complies with the Mining Act and that the applicant is the first one to do so.

Québec legislation and regulations can be consulted free of charge on the LégisQuébec website.21

Mining Act

The *Mining Act* regulates mining prospecting, research, exploration and exploitation. It seeks to promote dialogue with communities, promote processing in Québec, foster environmental protection and ensure greater transparency to achieve enhanced social acceptability, among other things, through:

public consultation by the promoter for any metal mine with a daily output capacity of less than 2 000 tonnes. The MERN has published the *Guide for public consultations conducted by the promoters of certain mining project*,²² which describes how to organize a public consultation in the context of the application of the *Mining Act*;

¹⁹ mern.gouv.qc.ca/ministere/acceptabilite-sociale.

 $^{20 \}quad www.quebecmunicipal.qc.ca/index.asp?module=articles\&action=details\&id=85423.$

²¹ legisquebec.gouv.qc.ca

 $^{22 \}quad mern.gouv.qc.ca/english/publications/mines/publications/Guide Consutation Promoteur Secteur Minier_ang_Web.pdf$

- the establishment of a monitoring committee to foster involvement by the local community in the project overall. The *Guide to the organization of the monitoring committee* ²³ is available on the MERN website. It contains information for mine operators and the participants in a monitoring committee;
- the approval of a rehabilitation and restoration plan prior to the issuance of a mining lease. To inform those concerned by the technical contents of such a plan and the general requirements concerning mine site rehabilitation in Québec, the MERN has published the Guide de préparation du plan de réaménagement et de restauration des sites miniers au Québec;²⁴
- the obligation to submit within two years of the date of approval of the plan a financial guarantee covering 100% of the cost of rehabilitation of the overall mine site;
- the annual publication of the quantity and value of mineral ore mined and the royalties paid to the State by mining companies, with a view to ensuring greater transparency;
- a chapter devoted to the Aboriginal communities, which calls for the elaboration of an « *Aboriginal communities consultation policy specific to the mining sector* ». The policy will round out the relevant government policy²⁵ and clarify the roles and responsibilities of the stakeholders. Its publication is slated for 2018. In 2015, the MERN collaborated with the Secrétariat aux affaires autochtones and other government departments to publish the "*Document d'information à l'intention des promoteurs et introduction générale aux relations avec les communautés autochtones dans le cadre de projets de mise en valeur des ressources naturelles.*" ²⁶

The Mining Tax Act

Pursuant to the *Mining Tax Act*, the Québec taxation system offers several measures to promote investment in exploration and pre-production development, including:

- the refundable duties credit for losses, a unique measure in Canada, which grants a refund of up to 16% of eligible work (exploration-related development and pre-production development);
- the allowance for eligible exploration expenses incurred with respect to a mineral resource in Québec;
- the eligible pre-production development expenses allowance in respect of certain mines located in Québec.

The *Mining Tax Act* also promotes mining operations, among other things in the territory that the Plan Nord covers, and fosters the treatment and transformation of the mineral substances mined.

By way of an example, the acquisition of assets used to process ore give rise to entitlement to an allowance, calculated according to a percentage of the cost of the assets, in light of the nature of the processing activity.

Mining companies pay by way of mining tax the higher of the following amounts:

- a minimum mining tax based on the mine-mouth output value at the rate of 1% on the first \$80 million of such value and 4% on the remainder;
- an annual mining tax on profit at progressive rates ranging from 16% to 28%, based on the company's profit margin.

The Taxation Act

The Québec government wishes to ensure that the taxation system applicable to Québec firms compares advantageously with those of its trading partners and to offer businesses conditions conducive to investment and innovation. The corporate and personal income tax systems include incentives to encourage mineral exploration:

- a 10-year tax holiday for major investment projects, applicable to corporate income tax and the contribution to the Health Services Fund;
- the tax credit relating to resources, which gives rise to a refund of up to 38.75% of the eligible exploration expenses that an eligible corporation incurs in Québec;
- the flow-through share regime, pursuant to which individuals may deduct up to 120% of the cost of their investment.

²³ mern.gouv.qc.ca/english/publications/mines/publications/GuideComiteSuivi-ang_Web_2016-09-13.pdf

²⁴ mern.gouv.qc.ca/mines/restauration/documents/Guide-restauration-sites-miniers_VF.pdf

²⁵ www.autochtones.gouv.qc.ca/publications_documentation/publications/guide_inter_2008.pdf.

²⁶ www.autochtones.gouv.qc.ca/publications_documentation/publications/2015-02-document-intention-promoteurs.pdf.

The Act respecting transparency measures in the mining, oil and gas industries

The Act respecting transparency measures in the mining, oil and gas industries obliges companies to declare the amounts that they pay each year to the different levels of government, government organizations, the municipalities, the Aboriginal communities, and to the organizations that exercise public functions on their behalf. The information obtained in the context of the administration of the Act is public.

The reporting obligation applies to businesses listed on a Canadian stock exchange whose head office is located in Québec, and to large businesses, whether or not they are listed on the stock exchange.

Payments totalling \$100,000 or more made during a fiscal year to a given beneficiary in a given category of payment such as taxes, royalties, fees, production entitlements, dividends, bonus payments, and contributions to infrastructure construction or improvements must be declared. The payments can be in kind or in cash.

To avoid adding needlessly to the administrative burden of businesses, the Act is harmonized with the Act respecting transparency measures in the mining, oil and gas industries that the federal Parliament adopted and with the requirements of the European Union Directive on Transparency. The Québec government may recognize that the requirements of another authority are equivalent to those stipulated in the Act. Companies thus do not have to produce different declarations in each country where they are taxable.

BROADEN AND MAKE PROFITABLE INVESTMENTS

The Capital Mines Hydrocarbures fund (CMH) enables the government to acquire interests in companies that mine or process mineral substances in the domain of the State. It has a capitalization of \$1 billion, half of which will be invested in the territory that the Plan Nord covers. The budget allowance is added to the \$500-million capitalization of Ressources Québec, the investment subsidiary of Investissement Québec, which is the gateway for businesses that wish to invest in the mining sector.

PROMOTE PROCESSING

Québec wishes to broaden the processing in its territory of mineral substances. Its location in North America, mining potential, infrastructure, available, skilled manpower and access to clean, competitively-priced electricity makes it an advantageous place to process mineral resources.

Furthermore, the Québec government offers a manufacturing and processing equipment investment tax credit. Depending on the investment projects submitted, it is also willing to offer competitive electricity rates.

The processing allowance stipulated in the Mining Tax Act encourages mining companies to engage in the treatment and transformation of mineral ore in Québec, such as crushing, milling, the flotation process, pelletization and the production of primary metal by casting or hydrometallurgy.

What is more, the request for a mining lease or its renewal must be accompanied by an economic opportunity and market study for the transformation of mineral ore in Québec. The MERN has published a quide entitled Guide for the preparation of a scoping and market study for processing in Québec.²⁷

QUÉBEC MINES CONGRESS

The Québec Mines congress²⁸ is the Québec mining industry's foremost event, held annually in November in Québec City. It is a hub for meetings and exchanges that assembles the main mining sector stakeholders from the academic, scientific, economic and industrial communities and representatives of the Aboriginal communities.

Québec Mines is renowned for its outstanding lectures, which feature international experts. The congress covers the entire array of mining development processes, i.e. exploration, transformation and mine site rehabilitation. The programming emphasizes the social acceptability of mining projects.

The event promotes Québec's mineral potential. The MERN takes advantage of the opportunity to disclose its latest on-site research findings.

²⁷ mern.gouv.qc.ca/english/publications/mines/guide_processing_en.pdf

²⁸ quebecmines.gouv.qc.ca

DETAILS OF MINING OPERATIONS



IRON — MINES AND MINING PROJECTS

Mining exploitation projects or projects under development ⁽¹⁾	Substances	Proved and probable reserves ⁽²⁾⁽³⁾	Measured and indicated resources ⁽²⁾⁽³⁾⁽⁴⁾	Year(s) of exploitation
DSO (Québec section) Tata Steel Minerals Canada www.tatasteelcanada.com	Iron			1954-1982 (29)
BlackRock BlackRock Metals www.blackrockmetals.com	Iron Ilmenite Vanadium	140.61 MT 26.49% Fe 8.26% TiO ₂ 0.50% V ₂ O ₅	*100.96 MT 21.94% Fe 7.49% TiO ₂ 0.41% V ₂ O ₅	
Active mines	Substances	Proved and probable reserves ⁽²⁾⁽³⁾	Measured and indicated resources ⁽²⁾⁽³⁾⁽⁴⁾	Year(s) of exploitation
Fire Lake ArcelorMittal Mining Canada G.P. www.transformerlavenir.com	Iron	Included in those of Mont-Wright		2006-2045 (39) 1977-1981 (5)
Lac Tio Rio Tinto Fer et Titane www.rtft.com	Ilmenite	128.00 MT 43.75% TiO ₂	84.60 MT 44.54% TiO ₂	1950-2051 (101)
Mont-Wright ArcelorMittal Mining Canada G.P. www.transformerlavenir.com	Iron	2 056.00 MT 28.13% Fe		1974-2046 (72)
Mine under maintenance	Substances	Proved and probable reserves ⁽²⁾⁽³⁾	Measured and indicated resources ⁽²⁾⁽³⁾⁽⁴⁾	Year(s) of exploitation
Lac Bloom Québec Iron Ore www.championiron.com	Iron	411.71 MT 29.99% Fe	*911.60 MT 29.71% Fe	2010-2014 (5)

⁽¹⁾ Includes the projects of Titane and Phosphore (the list is not exhaustive). For a complete list, please refer to the *Report on mineral activities* of the Ministère de l'Énergie et des Ressources naturelles (www.mern.gouv.qc.ca/mines/publications/publications-rapports.jsp).



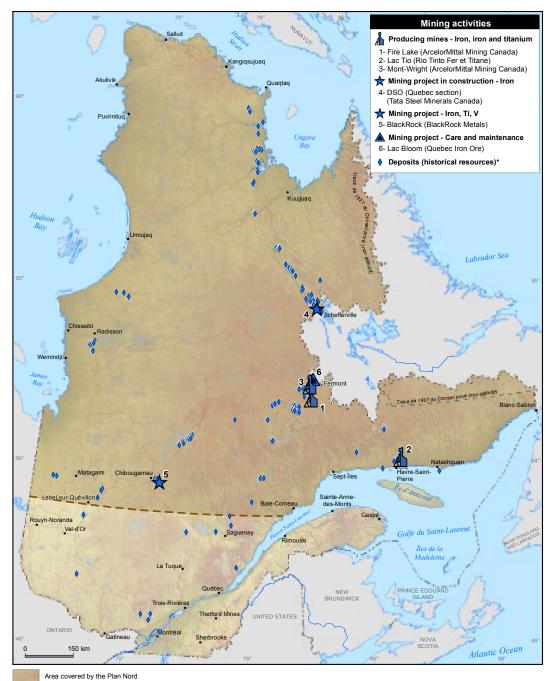
Photo: Francis Fontaine for MERN

⁽²⁾ The reserves and mineral resources are reported according to the NI 43-101 Standards of Disclosure for Mineral Projects. Note: mineral resources have not displayed economic viability and there is no certainty that the resources will be converted in whole or in part into reserves.

⁽³⁾ MT: million metric tonnes; %: percentage.

⁽⁴⁾ The resources preceded by an asterisk (*) include the reserves.

Iron — Mining activities in Québec



Quebec-Newfounland-and-Labrador border (this border is not final)

* Source: SIGÉOM.

GOLD — MINES AND MINING PROJECTS

Mining exploitation projects or projects under development	Substances	Proved and probable reserves ⁽¹⁾⁽²⁾	Measured and indicated resources ⁽¹⁾⁽²⁾⁽³⁾	Year(s) of exploitation
Akasaba Ouest Mines Agnico Eagle www.agnicoeagle.com	Gold Copper	4.94 MT 0.89 g/t Au 0.50% Cu	2.48 MT 0.66 g/t Au 0.40% Cu	
Barry Ressources Métanor www.metanor.ca	Gold		4.37 MT 1.34 g/t Au	2008-2010 (3)
Croinor Gold Corporation Aurifère Monarques www.monarquesresources.com	Gold	0.54 MT 6.77 g/t Au	0.80 MT 9.10 g/t Au	2003-2005 (2) 1996-1997 (1) 1944-1948 (5)
Douay Ouest Corporation Aurifère Aurvista www.aurvistagold.com	Gold			
Fayolle Exploration Typhon / Hecla Québec www.explorationtyphon.com	Gold		0.55 MT 5.75 g/t Au	
Granada Granada Gold Mines www.goldbulliondevelopmentcorp.com	Gold	0.57 MT 4.24 g/t Au	56.90 MT 0.93 g/t Au	1999-2002 (2) 1996-1996 (1) 1994-1994 (1) 1930-1935 (5)
Horne 5 Ressources Falco www.falcores.com	Gold Zinc Copper Silver		58.30 MT 1.82 g/t Au 1.00% Zn 0.20% Cu 15.60 g/t Ag	
Lac Windfall Minière Osisko www.miniereosisko.com	Gold		2.76 MT 8.42 g/t Au	
Lamaque Sud Integra Gord Corp. www.integragold.com	Gold		5.42 MT 6.78 g/t Au	
O'Brien Ressources minières Radisson www.radissonmining.com	Gold		0.57 MT 6.53 g/t Au	1933-1981 (48)



Photo: Francis Fontaine for MERN

Active mines	Substances	Proved and probable reserves(1)(2)	Measured and indicated resources ⁽¹⁾⁽²⁾⁽³⁾	Year(s) of exploitation
Beaufor Mines Richmont www.richmont-mines.com	Gold	0.20 MT 6.85 g/t Au	0.35 MT 7.37 g/t Au	2002-2022 (20) 1996-2001 (6) 1939-1942 (4)
Bracemac-McLeod Glencore Canada Corporation www.glencore.com	Zinc Copper Silver Gold	4.04 MT 6.86% Zn 1.13% Cu 27.09 g/t Ag 0.63 g/t Au	*6.44 MT 5.79% Zn 1.08% Cu 25.17 g/t Ag 0.52 g/t Au	2013-2021 (8)
Canadian Malartic Partenariat Canadian Malartic www.canadianmalartic.com	Gold Silver	203.67 MT 1.08 g/t Au	26.24 MT 1.53 g/t Au	2011-2028 (17) 1933-1965 (32) 1927-1929 (2)
Casa Berardi (Golden Pound) Hecla Québec www.hecla-mining.com	Gold	10.33 MT 3.89 g/t Au	13.33 MT 3.41 g/t Au	2007-2028 (21) 1988-1997 (8)
Elder Mines Abcourt www.abcourt.com	Gold		1.18 MT 6.58 g/t Au	2016-2025 (9) 1984-1989 (5) 1947-1966 (19)
Éléonore Les Mines Opinaca www.goldcorp.com	Gold	23.44 MT 6.07 g/t Au	5.13 MT 5.66 g/t Au	2015-2025 (10)
Goldex Mines Agnico Eagle www.agnicoeagle.com	Gold	16.80 MT 1.64 g/t Au	30.31 MT 1.82 g/t Au	2013-2024 (11) 2008-2011 (3)
Lac Bachelor Ressources Métanor www.metanor.ca	Gold	0.84 MT 7.38 g/t Au	0.84 MT 7.79 g/t Au	2013-2020 (8) 1982-1989 (7)
Langlois (Grevet) Nyrstar Langlois www.nyrstar.com	Zinc Copper Lead Silver Gold	2.54 MT 9.19% Zn 0.81% Cu 0.32% Pb 51.03 g/t Ag 0.05 g/t Au	*4.43 MT 10.37% Zn 0.68% Cu 0.26% Pb 52.68 g/t Ag 0.06 g/t Au	2012-2023 (11) 2007-2008 (2) 1997-2000 (3) 1996-1996 (1)
Lapa Mines Agnico Eagle www.agnicoeagle.com	Gold	0.26 MT 4.58 g/t Au	0.78 MT 4.22 g/t Au	2009-2017 (9)

Active mines	Substances	Proved and probable reserves ⁽¹⁾⁽²⁾	Measured and indicated resources(1)(2)(3)	Year(s) of exploitation
LaRonde Mines Agnico Eagle www.agnicoeagle.com	Gold Zinc Copper Silver	17.59 MT 5.40 g/t Au 0.87% Zn 0.24% Cu 19.15 g/t Ag	5.69 MT 3.27 g/t Au 0.93% Zn 0.21% Cu 20.51 g/t Ag	1988-2026 (38)
Nunavik Nickel Canadian Royalties www.canadianroyalties.com	Nickel Cobalt Copper Palladium Gold Platinum			2014-2029 (15)
Vezza Ressources Nottaway www.promecmining.com	Gold		1.24 MT 6.62 g/t Au	2016-2021 (5) 2012-2013 (2) 1995-1997 (3)
Westwood Société IAMGOLD www.iamgold.com	Gold	3.69 MT 8.84 g/t Au	*2.73 MT 13.51 g/t Au	2013-2035 (22)
Mine under maintenance	Substances	Proved and probable reserves(1)(2)	Measured and indicated resources ⁽¹⁾⁽²⁾⁽³⁾	Year(s) of exploitation
Lac Herbin Corporation aurifère QMX www.qmxgold.ca	Gold			2008-2016 (9)

⁽¹⁾ The reserves and mineral resources are reported according to the NI 43-101 Standards of Disclosure for Mineral Projects. Note: mineral resources have not displayed economic viability and there is no certainty that the resources will be converted in whole or in part into reserves.

⁽²⁾ MT: million metric tonnes; g/t: gram/tonne.

⁽³⁾ The resources preceded by an asterisk (*) include the reserves.

* Source: SIGÉOM.

OUÉBEC'S MINING SECTOR - **2017** Ministère de l'Épardie et des Ressources paturelles

NICKEL, PLATINUM GROUP METALS AND COBALT — MINES AND MINING PROJECTS

Mining exploitation project	Substances	Proved and probable reserves ⁽¹⁾⁽²⁾	Measured and indicated resources ⁽¹⁾⁽²⁾⁽³⁾	Year(s) of exploitation
Dumont Nickel RNC Minéraux www.royalnickel.com	Nickel Cobalt Palladium Platinum	1 178.60 MT 0.27% Ni 107.22 g/t Co 0.02 g/t Pd 0.01 g/t Pt	1 665.60 MT 0.26% Ni 107.34 g/t Co 0.02 g/t Pd 0.01 g/t Pt	
Active mines	Substances	Proved and probable reserves ⁽¹⁾⁽²⁾	Measured and indicated resources ⁽¹⁾⁽²⁾⁽³⁾	Year(s) of exploitation
Nunavik Nickel Canadian Royalties www.canadianroyalties.com	Nickel Cobalt Copper Palladium Gold Platinum			2014-2029 (15)
Raglan Glencore Canada Corporation www.glencore.com	Nickel Copper Cobalt Palladium Platinum	10.03 MT 3.07% Ni 0.76% Cu 0.06% Co 2.01 g/t Pd 0.86 g/t Pt	* 18.94 MT 3.46% Ni 0.97% Cu 0.07% Co 2.41 g/t Pd 0.98 g/t Pt	1997-2040 (43)

⁽¹⁾ The reserves and mineral resources are reported according to the NI 43-101 Standards of Disclosure for Mineral Projects. Note: mineral resources have not displayed economic viability and there is no certainty that the resources will be converted in whole or in part into reserves.



Photo: Francis Fontaine for MERN

⁽²⁾ MT: millions of metric tonnes; %: percentage; g/t: gram/tonne.

⁽³⁾ The resources preceded by an asterisk (*) include the reserves.

Nickel — Mining activities in Québec



Quebec-Newfounland-and-Labrador border (this border is not final)

* Source: SIGÉOM.

COPPER — MINES AND MINING PROJECTS

Mining exploitation projects	Substances	Proved and probable reserves ⁽¹⁾⁽²⁾	Measured and indicated resources ⁽¹⁾⁽²⁾⁽³⁾	Year(s) of exploitation
Akasaba Ouest Mines Agnico Eagle www.agnicoeagle.com	Gold Copper	4.94 MT 0.89 g/t Au 0.50% Cu	2.48 MT 0.66 g/t Au 0.40% Cu	
Horne 5 Ressources Falco www.falcores.com	Gold Zinc Copper Silver		58.30 MT 1.82 g/t Au 1.00% Zn 0.20% Cu 15.60 g/t Ag	
Active mines	Substances	Proved and probable reserves ⁽¹⁾⁽²⁾	Measured and indicated resources ⁽¹⁾⁽²⁾⁽³⁾	Year(s) of exploitation
Bracemac-McLeod Glencore Canada Corporation www.glencore.com	Zinc Copper Silver Gold	4.04 MT 6.86% Zn 1.13% Cu 27.09 g/t Ag 0.63 g/t Au	*6.44 MT 5.79% Zn 1.08% Cu 25.17 g/t Ag 52 g/t Au	2013-2021 (8)
Langlois (Grevet) Nyrstar Langlois www.nyrstar.com	Zinc Copper Lead Silver Gold	2.54 MT 9.19% Zn 0.81% Cu 0.32% Pb 51.03 g/t Ag 0.05 g/t Au	*4.43 MT 10.37% Zn 0.68% Cu 0.26% Pb 52.68 g/t Ag 0.06 g/t Au	2012-2023 (11) 2007-2008 (2) 1997-2000 (3) 1996-1996 (1)
LaRonde Mines Agnico Eagle www.agnicoeagle.com	Gold Zinc Copper Silver	17.59 MT 5.40 g/t Au 0.87% Zn 0.24% Cu 19.15 g/t Ag	5.69 MT 3.27 g/t Au 0.93% Zn 0.21% Cu 20.51 g/t Ag	1988-2026 (38)
Nunavik Nickel Canadian Royalties www.canadianroyalties.com	Nickel Cobalt Copper Palladium Gold Platinum			2014-2029 (15)
Raglan Glencore Canada Corporation www.glencore.com	Nickel Copper Cobalt Palladium Platinum	10.03 MT 3.07% Ni 0.76% Cu 0.06% Co 2.01 g/t Pd 0.86 g/t Pt	*18.94 MT 3.46% Ni 0.97% Cu 0.07% Co 2.41 g/t Pd 0.98 g/t Pt	1997-2040 (43)

⁽¹⁾ The reserves and mineral resources are reported according to the NI 43-101 Standards of Disclosure for Mineral Projects. Note: mineral resources have not displayed economic viability and there is no certainty that the resources will be converted in whole or in part into reserves.

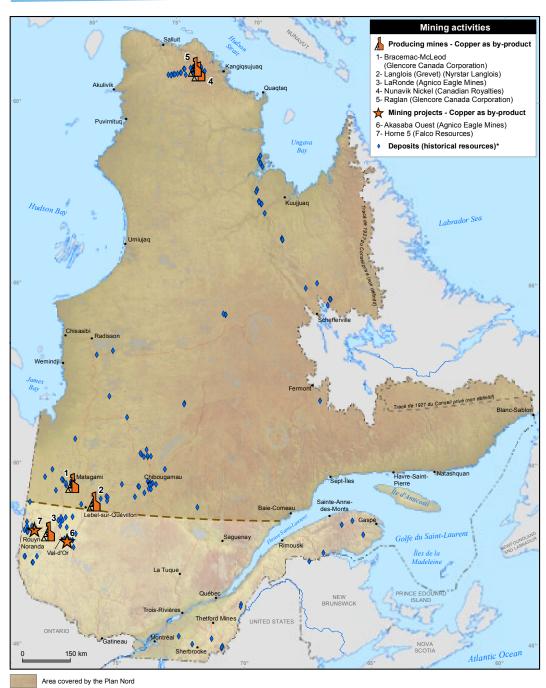


Photo: Francis Fontaine for MERN

⁽²⁾ MT: millions of metric tonnes; %: percentage; g/t: gram/tonne.

⁽³⁾ The resources preceded by an asterisk (*) include the reserves.

Copper — Mining activities in Québec



Quebec-Newfounland-and-Labrador border (this border is not final)

* Source: SIGÉOM.

ZINC — MINES AND MINING PROJECT

Mining exploitation project	Substances	Proved and probable reserves ⁽¹⁾⁽²⁾	Measured and indicated resources(1)(2)(3)	Year(s) of exploitation
Horne 5 Ressources Falco www.falcores.com	Gold Zinc Copper Silver		58.30 MT 1.82 g/t Au 1.00% Zn 0.20% Cu 15.60 g/t Ag	
Active mines	Substances	Proved and probable reserves ⁽¹⁾⁽²⁾	Measured and indicated resources ⁽¹⁾⁽²⁾⁽³⁾	Year(s) of exploitation
Bracemac-McLeod Glencore Canada Corporation www.glencore.com	Zinc Copper Silver Gold	4.04 MT 6.86% Zn 1.13% Cu 27.09 g/t Ag 0.63 g/t Au	*6.44 MT 5.79% Zn 1.08% Cu 25.17 g/t Ag 0.52 g/t Au	2013-2021 (8)
Langlois (Grevet) Nyrstar Langlois www.nyrstar.com	Zinc Copper Lead Silver Gold	2.54 MT 9.19% Zn 0.81% Cu 0.32% Pb 51.03 g/t Ag 0.05 g/t Au	*4.43 MT 10.37% Zn 0.68% Cu 0.26% Pb 52.68 g/t Ag 0.06 g/t Au	2012-2023 (11) 2007-2008 (2) 1997-2000 (3) 1996-1996 (1)
LaRonde Mines Agnico Eagle www.agnicoeagle.com	Gold Zinc Copper Silver	17.59 MT 5,40 g/t Au 0.87% Zn 0.24% Cu 19.15 g/t Ag	5.69 MT 3,27 g/t Au 0.93% Zn 0.21% Cu 20.51 g/t Ag	1988-2026 (38)

⁽¹⁾ The reserves and mineral resources are reported according to the NI 43-101 Standards of Disclosure for Mineral Projects. Note: mineral resources have not displayed economic viability and there is no certainty that the resources will be converted in whole or in part into reserves.

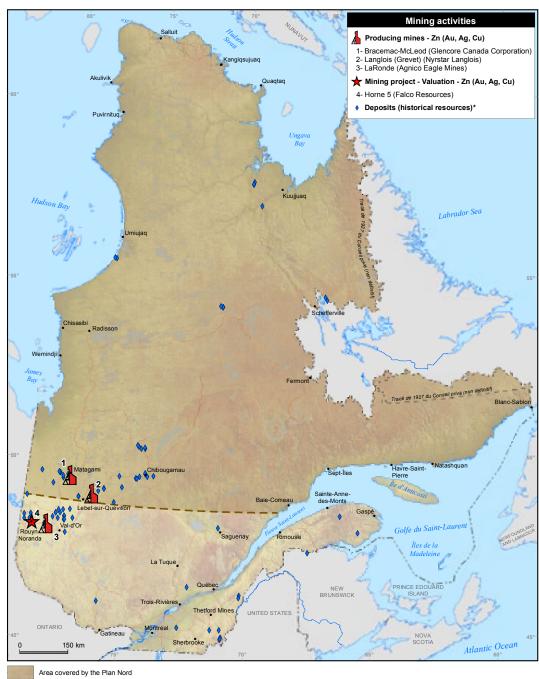


Photo: Francis Fontaine for MERN

⁽²⁾ MT: millions of metric tonnes; %: percentage; g/t: gram/tonne.

⁽³⁾ The resources preceded by an asterisk (*) include the reserves.

Zinc — Mining activities in Québec



Quebec-Newfounland-and-Labrador border (this border is not final)

* Source: SIGÉOM.

OUÉBEC'S MINING SECTOR - 2017 Ministère de l'Éperais et des Personnes pat melles

NIOBIUM AND TANTALUM — MINE AND MINING PROJECT

Mining exploitation project	Substances	Proved and probable reserves ⁽¹⁾⁽²⁾	Measured and indicated resources ⁽¹⁾⁽²⁾	Year(s) of exploitation
Rose Tantale-Lithium Critical Elements Corporation www.cecorp.ca	Lithium Tantalum		26.50 MT 0.98% Li ₂ 0 163.00 g/t Ta ₂ 0 ₅	
Active mine	Substances	Proved and probable reserves ⁽¹⁾⁽²⁾	Measured and indicated resources ⁽¹⁾⁽²⁾	Year(s) of exploitation
Niobec Niobec www.niobec.com	Niobium	416.42 MT 0.41% Nb ₂ O ₅	288.68 MT 0.43% Nb ₂ O ₅	1976-2045 (70)

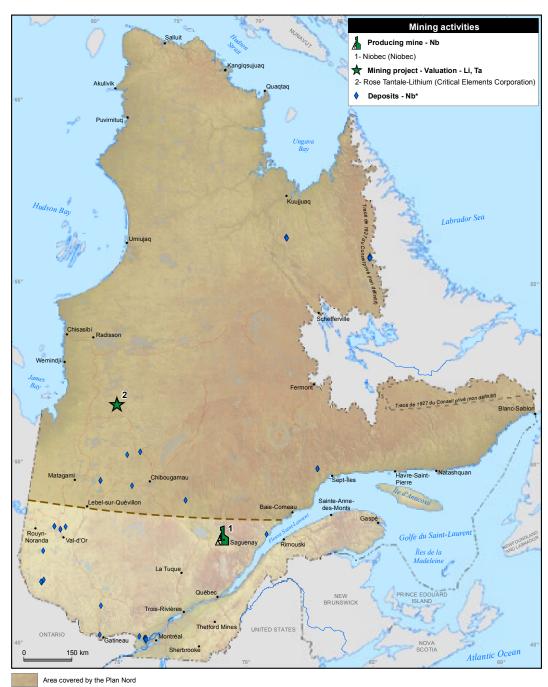
⁽¹⁾ The reserves and mineral resources are reported according to the NI 43-101 Standards of Disclosure for Mineral Projects. Note: mineral resources have not displayed economic viability and there is no certainty that the resources will be converted in whole or in part into reserves.



Photo: Francis Fontaine for MERN

⁽²⁾ MT: millions of metric tonnes; %: percentage; g/t: gram/tonne.

Niobium and tantalum — Mining activities in Québec



Quebec-Newfounland-and-Labrador border (this border is not final)

RARE EARTHS — MINING PROJECTS

Mining exploitation projects	Substances	Proved and probable reserves ⁽¹⁾⁽²⁾⁽³⁾	Measured and indicated resources(1)(2)(3)(4)	Year(s) of exploitation
Eldor (Ashram) Corporation de Ressources Commerciales www.commerceresources.com	Rare earths Light rare earths Heavy rare earths Yttrium		29.26 MT 1.89% TREO 1.81% LREO 0.05% HREO 0.04% Y ₂ O ₃	
Kipawa (Zeus) Matamec Explorations www.matamec.com	Rare earths Light rare earths Yttrium Heavy rare earths	19.77 MT 0.41% TREO 0.26% LREO 0.09% Y ₂ O ₃ 0.06% HREO	*23.86 MT 0.41% TRE0 0.26% LRE0 0.09% Y ₂ 0 ₃ 0.06% HRE0	
Strange Lake / B-Zone Minéraux rares Quest www.questrareminerals.com	Rare earths Light rare earths Heavy rare earths		*2 778.13 MT 0.85% TREO 0.57% LREO 0.30% HREO	

⁽¹⁾ The reserves and mineral resources are reported according to the NI 43-101 Standards of Disclosure for Mineral Projects. Note: mineral resources have not displayed economic viability and there is no certainty that the resources will be converted in whole or in part into reserves.



Photo: Francis Fontaine for MERN

⁽²⁾ MT: millions of metric tonnes; %: percentage.

⁽³⁾ TREO: the sum of the rare earth oxides plus yttrium oxide; LREO: the sum of the light rare earth oxides (La-Sm); HREO: the sum of the heavy rare earth oxides (Eu-Lu).

⁽⁴⁾ The resources preceded by an asterisk (*) include the reserves.

Rare earths — Mining activities in Québec



Quebec-Newfounland-and-Labrador border (this border is not final)

LITHIUM — MINING PROJECTS

Mining exploitation projects or projects under development	Substances	Proved and probable reserves ⁽¹⁾⁽²⁾	Measured and indicated resources(1)(2)(3)	Year(s) of exploitation
North American Lithium Jien Lithium Industries	Lithium	17.06 MT 0.94% Li ₂ 0	*33.24 MT 1.19% Li ₂ 0	1956-1965 (9)
Whabouchi Nemaska Lithium www.nemaskalithium.com	Lithium	27.30 MT 1.46% Li ₂ 0	*36.62 MT 1.48% Li ₂ 0	
Authier Sayona Québec www.sayonamining.com.au	Lithium	10.20 MT 1.02% Li ₂ 0	11.85 MT 1.07% Li ₂ 0	
Rose Tantale-Lithium Corporation Éléments Critiques www.cecorp.ca	Lithium Tantalum		26.50 MT 0.98% Li ₂ 0 163.00 g/t Ta ₂ 0 ₅	

⁽¹⁾ The reserves and mineral resources are reported according to the NI 43-101 Standards of Disclosure for Mineral Projects. Note: mineral resources have not displayed economic viability and there is no certainty that the resources will be converted in whole or in part into reserves.

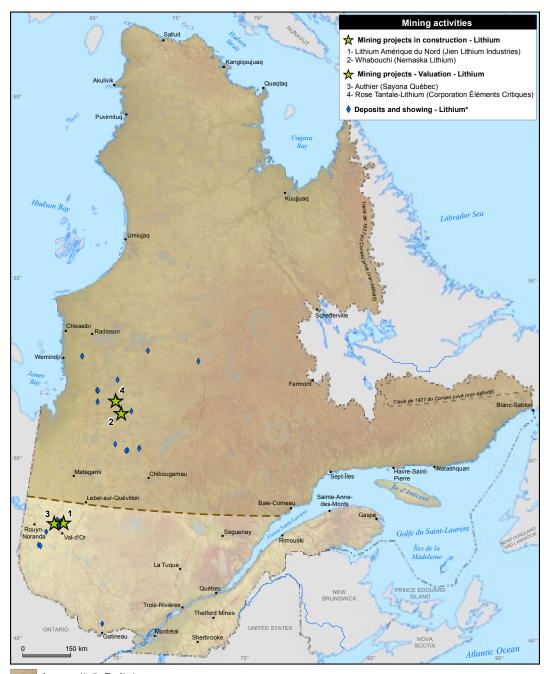


Photo: Francis Fontaine for MERN

⁽²⁾ MT: millions of metric tonnes; %: percentage; g/t: gram/tonne.

⁽³⁾ The resources preceded by an asterisk (*) include the reserves.

Lithium — Mining activities in Québec



Area covered by the Plan Nord

Quebec-Newfounland-and-Labrador border (this border is not final)

* Source: SIGÉOM.

GRAPHITE — MINE AND MINING PROJECTS

Mining exploitation projects	Substances	Proved and probable reserves(1)(2)	Measured and indicated resources(1)(2)(3)	Year(s) of exploitation
Lac Guéret Mason Graphite www.masongraphite.com	Graphite	4.74 MT 27.78%	* 65.69 MT 17.19%	
Lac Knife Focus Graphite www.focusmetals.ca	Graphite	7.86 MT 15.13%	*12.10 MT 14.64%	
Matawinie Entreprises minières du Nouveau Monde nouveaumonde.ca	Graphite		*48.60 MT 3.97%	
Miller Canada Carbon www.canadacarbon.com	Graphite			1845-1900 (56)
Active mine	Substances	Proved and probable reserves ⁽¹⁾⁽²⁾	Measured and indicated resources ⁽¹⁾⁽²⁾	Year(s) of exploitation
Lac-des-Îles Imerys Graphite & Carbone Canada www.imerys-graphite-and-carbon.com	Graphite			1989-2020 (31)

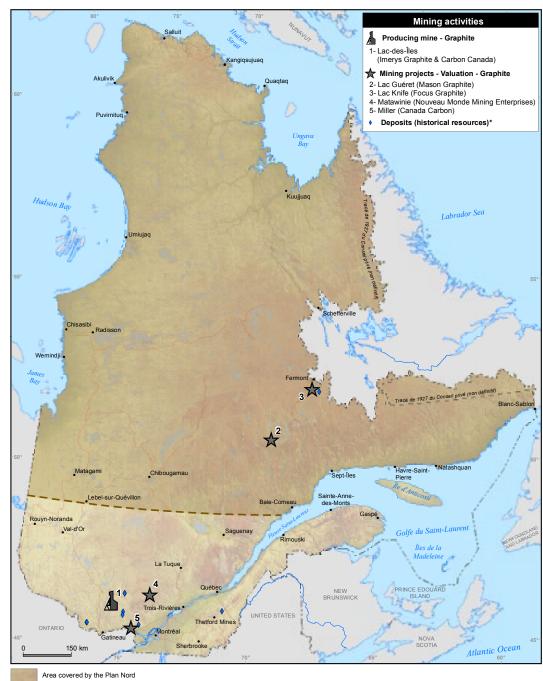
⁽¹⁾ The reserves and mineral resources are reported according to the NI 43-101 Standards of Disclosure for Mineral Projects. Note: mineral resources have not displayed economic viability and there is no certainty that the resources will be converted in whole or in part into reserves.



Photo: Francis Fontaine for MERN

⁽²⁾ MT: millions of metric tonnes; %: percentage.

⁽³⁾ The resources preceded by an asterisk (*) include the reserves.



Quebec-Newfounland-and-Labrador border (this border is not final)

APATITE — MINING PROJECTS

Mining exploitation projects	Substances	Proved and probable reserves ⁽¹⁾⁽²⁾	Measured and indicated resources ⁽¹⁾⁽²⁾⁽³⁾	Year(s) of exploitation
Arnaud Arnaud Mine www.minearnaud.com	Apatite	342.60 MT 4.30% P ₂ O ₅	*545.49 MT 4.00% P ₂ O ₅	
Lac à Paul Arianne Phosphate www.arianne-inc.com	Apatite Ilmenite	472.09 MT 6.88% P ₂ O ₅	*702.70 MT 7.16% P ₂ O ₅ 7.71% TiO ₂	

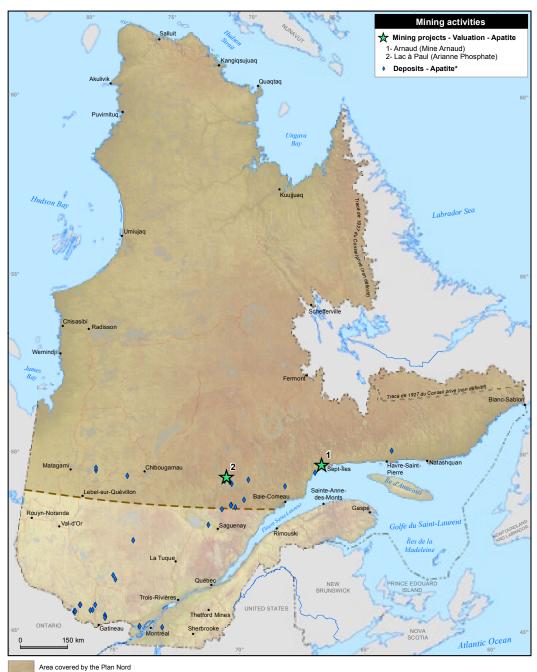
⁽¹⁾ The reserves and mineral resources are reported according to the NI 43-101 Standards of Disclosure for Mineral Projects. Note: mineral resources have not displayed economic viability and there is no certainty that the resources will be converted in whole or in part into reserves.

- (2) MT: millions of metric tonnes; %: percentage.
- (3) The resources preceded by an asterisk (*) include the reserves.



Photo: Francis Fontaine for MERN

Apatite — Mining activities in Québec



Quebec-Newfounland-and-Labrador border (this border is not final)

* Source: SIGÉOM.

DIAMONDS - MINE

Active mine	Substance	Proved and probable reserves ⁽¹⁾⁽²⁾	Measured and indicated resources ⁽¹⁾⁽²⁾	Year(s) of exploitation
Renard Société de diamant Stornoway www.stornowaydiamonds.com	Diamonds	33.00 MT 0.67 c/t	3.37 MT 0.46 c/t	2017-2031 (14)

⁽¹⁾ The reserves and mineral resources are reported according to the NI 43-101 Standards of Disclosure for Mineral Projects. Note: mineral resources have not displayed economic viability and there is no certainty that the resources will be converted in whole or in part into reserves.



Photo: Société de Diamant Stornoway

⁽²⁾ DD: diamond; MT: million metric tonnes; c/t: carat/tonne.

Diamonds — Mining activities in Québec



Quebec-Newfounland-and-Labrador border (this border is not final)

FREQUENTLY ASKED QUESTIONS ON THE QUÉBEC MINING SECTOR

How do the Québec and federal governments share powers in respect of the mining sector?

The powers of the federal and provincial governments are shared by field. The management and oversight of natural resource exploitation, including mining operation, fall under Québec's exclusive jurisdiction.

The environment is, nevertheless, an area of shared jurisdiction between the federal government and the Québec government. Moreover, any business established in Québec is subject to both federal and Québec taxing statutes.

What regulatory process applies to have approved a mining project, from mineral exploration to the opening of the mine and from its opening to its closing?

Pursuant to the *Mining Act*, prior to engaging in mineral exploration, a claim must be obtained from the MERN that grants the exclusive right to search for mineral substances on a clearly delimited piece of land. In the case of private land, the claim holder must obtain written authorization from the landowner before entering the land and engaging in exploration work. The claim holder must also notify the municipality and the landowner of obtaining the right within 60 days of registration. He must inform the municipality and the landowner of the execution of the work at least 30 days before commencing such work. He must at all times comply with the provisions in the *Environment Quality Act* and obtain the requisite authorizations and licences for this purpose. Other legislation may also apply.

If he discovers a deposit, the claim holder must obtain a mining lease pursuant to the *Mining Act* in order to exploit it. The lease application must be accompanied by a survey plan of the land concerned, a report certified by an engineer or a geologist that satisfies the qualification requirements stipulated by regulation, a project feasibility study, and an economic opportunity and market study considering transformation in Québec.

Prior to submitting the mining lease application, the mining company must submit to the MERN a rehabilitation and restoration plan, which must be accessible to the public at least 30 days before the public consultation. The mining lease cannot be concluded before the rehabilitation and restoration plan has been approved in accordance with the *Mining Act* and the certificate of authorization stipulated in the *Environment Quality Act* has been issued. The *Mining Act* allows the government, when a mining lease is concluded and for reasonable and probable cause, to require the maximization of economic spinoff in Québec, including primary processing.

What is more, a financial guarantee is required in respect of site rehabilitation. It corresponds to the anticipated cost of carrying out the work stipulated in the rehabilitation and restoration plan. The guarantee must be provided in three payments, the first one (50%) within 90 days of the approval of the plan and the subsequent payments (of 25% each) on the anniversary date of the plan's approval. Certain exploration work also requires the submission of a financial guarantee to the MERN.

Pursuant to the *Environment Quality Act*, metal products processing plant construction and operation projects as well as projects to develop and operate a metalliferous ore mine with a daily processing or production capacity of 2,000 tonnes or more, and all projects pertaining to the exploitation of rare earths, regardless of the processing and production capacity, are subject to an environmental impact assessment.

Pursuant to the *Mining Act*, the granting of a mining lease for a metal mine with a daily productive capacity of less than 2,000 tonnes and the granting of a surface mineral substances mining lease for peat or necessary for an industrial activity or a commercial exporting activity are subject beforehand to a public consultation organized by the promoter. Once the mining lease has been issued, the lessee must establish a monitoring committee to promote the local community's involvement in the project overall.

Upon the cessation of mining operations, the mine operator may be required to obtain one or more certificates of authorization from the MDDELCC to carry out rehabilitation work. The financial guarantee will be returned to the mine operator when all of the rehabilitation obligations are fulfilled to the satisfaction of the MERN and the MDDELCC.

Do foreign investors have the same rights as Canadian investors?

All investors, whether they are Canadian or foreign, are treated on an equal footing in Québec and in Canada. However, certain rules govern takeovers by foreign interests of Canadian companies.²⁹

Does a mining company have to hire workers from a given region or a specific labour union? Can it provide its own workers?

The Québec government encourages companies to employ Québec workers from neighbouring communities. Québec has skilled workers in the mining sector who are found mainly in mining regions. However, a company established in Québec can hire workers from all over Canada. It is not usually possible to bring workers from outside Canada to fill positions that Canadians could occupy, except when recruitment problems arise.³⁰

Does Québec maintain standards to ensure worker safety in the mining sector?

The Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST) administers the occupational health and safety system. In particular, it applies the *Regulation respecting occupational health and safety in mines*.³¹

Moreover, the *Association paritaire pour la santé et la sécurité du travail du secteur minier*³² helps workers and employers in the mining sector to eliminate at the source threats to the health, safety and physical integrity of workers.

What mining associations are active in Québec?

Three mining associations are active in Québec: the Quebec Mineral Exploration Association (QMEA),³³ the Québec Mining Association (QMA),³⁴ and the Association des producteurs de tourbe horticole du Québec (APTHQ).³⁵

- 29 www.bdp.parl.gc.ca/content/lop/researchpublications/cei-22-f.htm.
- 30 www.emploiquebec.gouv.qc.ca/entreprises/recruter/recruter-de-la-main-doeuvre-hors-quebec.
- 31 legisquebec.gouv.qc.ca/fr/ShowDoc/cr/S-2.1.%20r.%2014.
- 32 aspmines.qc.ca.
- 33 www.aemq.org.
- 34 www.amg-inc.com
- 35 tourbehorticole.com/fr/industrie-partenaires/apthq.php.

What are the roles and responsibilities of the main government departments and bodies that intervene with foreign companies wishing to invest in a mining project in Québec?

- The Ministère de l'Énergie et des Ressources naturelles deals with all facets of mineral exploration and mining operations (licences, mineral rights, authorizations, leases, and so on).
- The Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques³⁶ focuses on the environment and environmental impacts.
- The Ministère des Finances³⁷, the Ministère de l'Économie, de la Science et de l'Innovation³⁸ and Investissement Québec and its subsidiary Ressources Québec are responsible for financial assistance, equity participation and general support for businesses.

Other government departments and bodies are also concerned depending on their areas of jurisdiction.

Which legislation and regulations apply most often to mineral exploration and mining operations?

Québec statutes and regulations:

- the Mining Act (M-13.1) and the Regulation respecting mineral substances other than petroleum, natural gas and brine (M-13.1, r. 2)
- the Act respecting transparency measures in the mining, oil and gas industries (M-11.5) and the Regulation respecting the application of the Act respecting transparency measures in the mining, oil and gas industries (M-11.5, ss. 6, 9 and 18)
- the Mining Tax Act
- the Sustainable Forest Development Act (A-18.1) and the Regulation respecting standards of forest management for forests in the domain of the State (A-18.1, r. 7)
- the Act respecting the lands in the domain of the State (T-8.1)
- the Environment Quality Act (Q-2), the Regulation respecting pits and quarries (Q-2, r. 7) and the Regulation respecting environmental impact assessment and review (Q-2, r. 23)
- the Act respecting occupational health and safety (S-2.1) and the Regulation respecting occupational health and safety in mines (S-2.1, r. 14)
- the Natural Heritage Conservation Act (C-61.01)
- the Act respecting the conservation and development of wildlife (C-61.1)
- the Parks Act (P-9)

The legislation and regulations can be consulted on the LégisQuébec website. 39

Federal government statutes and regulations:

- the Canadian Environmental Assessment Act (S.C. 2012, c. 19, s. 52)
- the Fisheries Act (R.S.C., 1985, c. F-14) and the Metal Mining Effluent Regulations (SOR/2002-222)
- the Nuclear Safety and Control Act (S.C. 1997, c. 9) and various implementing regulations

The legislation and regulations can be consulted on the website devoted to federal legislation.⁴⁰

³⁷ www.finances.gouv.qc.ca.

³⁸ www.economie.gouv.qc.ca.

³⁹ legisquebec.gouv.qc.ca

⁴⁰ laws-lois.justice.gc.ca

TO CONTACT US

To obtain additional information, please contact an international office of Investissement $Qu\acute{e}bec^{41}$ or the Ministère des Relations internationales et de la Francophonie⁴².

Québec government offices abro	oad								
Investissement Québec									
Location	Phone			Email					
Montréal (Canada)	1-514-873-4664	1-514-873-4664		info@invest-quebec.com					
Atlanta (United States)	1-404-584-5340	1-404-584-5340		info@invest-quebec.com					
Chicago (United States)	1-312-645-0398	1-312-645-0398		info@invest-quebec.com					
Los Angeles (United States)	1-310-209-3332		info@invest-quebec.com						
New York (United States)	1-212-843-0976	1-212-843-0976		info@invest-quebec.com					
London (United Kingdom)	+44 20 7766 5900	+44 20 7766 5900		info@invest-quebec.com					
Munich (Germany)	+49 (0) 89 255 49 31-	19	info@invest-quebec.com						
Paris (France)	+33 (0)1 40 67 85 2	6	info@invest-quebec.com						
Stockholm (Sweden)	+46 8 453 30 37		info@invest-quebec.com						
Beijing (China)	+86 10 5139 4265		info@invest-quebec.com						
Tokyo (Japan)	+81 3 5733-4588		info@invest-quebec.com						
Seoul (South Korea)	+82 2 3703 7706		info@invest-quebec.com						
Mumbai (India)	+91 22 6749 4486		info@inv	est-quebec.com					
Ministère des Relations internationales et de la Francophonie									
Location	Phone	- p	Email						
Atlanta (United States)	1-404-584-2995		qc.atlanta@mri.gouv.qc.ca						
Boston (United States)	1-617-482-1193	1-617-482-1193		qc.boston@mri.gouv.qc.ca					
Chicago (United States)	1-312-645-0392	1-312-645-0392		qc.chicago@mri.gouv.qc.ca					
Los Angeles (United States)	1-310-824-4173		qc.losangeles@mri.gouv.qc.ca						
New York (United States)	1-212-843-0950		qc.newyork@mri.gouv.qc.ca						
Washington (United States)	1-202-659-8990			qc.washington@mri.gouv.qc.ca					
Houston (United States)	1-713-968-9836	1-713-968-9836		qc.houston@mri.gouv.qc.ca					
Mexico City (Mexico)	+52 (55) 1110-4330	+52 (55) 1110-4330		qc.mexico@mri.gouv.qc.ca					
São Paulo (Brazil)	+55 (11) 5505 0444	` '		qc.saopaulo@mri.gouv.qc.ca					
Beijing (China)	+86 10 5139 4000			qc.beijing@mri.gouv.qc.ca					
Shanghai (China)	+86 021 3279 2800	+86 021 3279 2800		qc.shanghai@mri.gouv.qc.ca					
Quingdao (China)	(86-532) 6695 0965			qc.quingdao@mri.gouv.qc.ca					
Mumbai (India)	+91 22 6749 4444	, ,		qc.mumbai@mri.gouv.qc.ca					
Seoul (South Korea)	+82 2 3703 7700			qc.seoul@mri.gouv.qc.ca					
Tokyo (Japan)	+81 03 5733 4001			qc.tokyo@mri.gouv.qc.ca					
Barcelona (Spain)	+34 93 476 42 58			qc.barcelone@mri.gouv.qc.ca					
Berlin (Germany)	+49 (0) 89 25 54 931	+49 (0) 89 25 54 9316		qc.berlin@mri.gouv.qc.ca					
Munich (Germany)		+49 (0) 89 255 49 31-0		qc.munich@mri.gouv.qc.ca					
Brussels (Belgium)	. ,	+32 (0) 2 512 00 36		qc.bruxelles@mri.gouv.qc.ca					
London (United Kingdom)	. , ,	+44 (0) 207 766 5900		qc.londres@mri.gouv.qc.ca					
Rome (Italy)	+39 06 4 203 4501	* *		qc.rome@mri.gouv.qc.ca					
Paris (France)		+33 (0) 1 40 67 85 00		qc.paris@mri.gouv.qc.ca					
Dakar (Senegal)				qc.dakar@mri.gouv.qc.ca					
Other government departments			qo.aanar	5					
Last name	Phone	uence	Email	Website					
Ministère de l'Énergie et	I none								
des Ressources naturelles	1-866-248-6936	-866-248-6936 service.cliente		www.mern.gouv.qc.ca					
Ministère du Développement durable,									
de l'Environnement et de la Lutte	1-800-561-1616	info@mddelcc.gouv.qc.ca www.mddelcc.gouv.qi		www.mddelcc.gouv.gc.ca					
contre les changements climatiques	1-000-301-1010	www.muueicc.gouv.qc.ca							
contre les changements climatiques	1								

⁴¹ www.investquebec.com/fr/index.aspx?rubrique=40&page=1543

⁴² www.mrif.gouv.qc.ca/fr/ministere/representation-etranger

