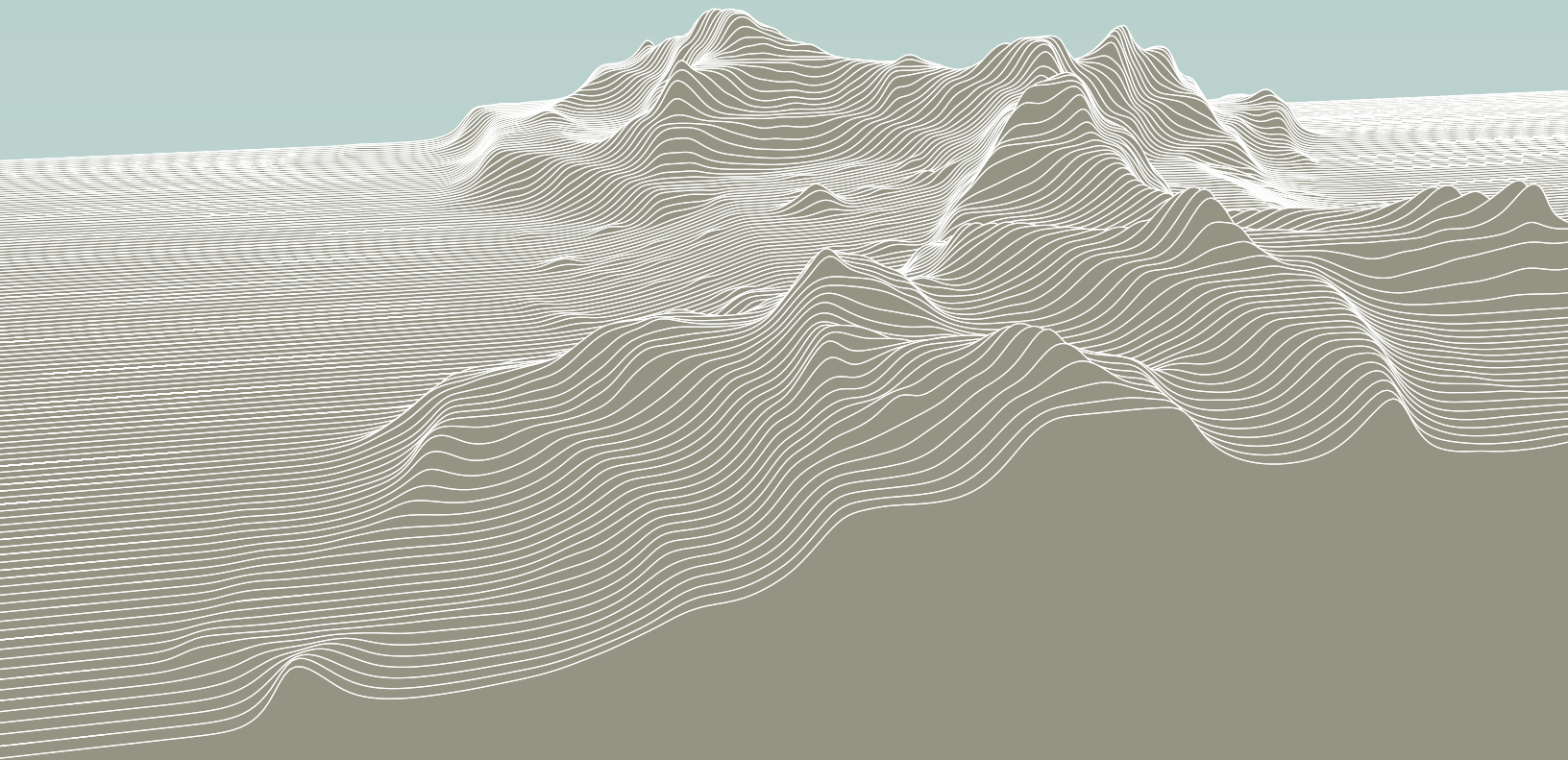


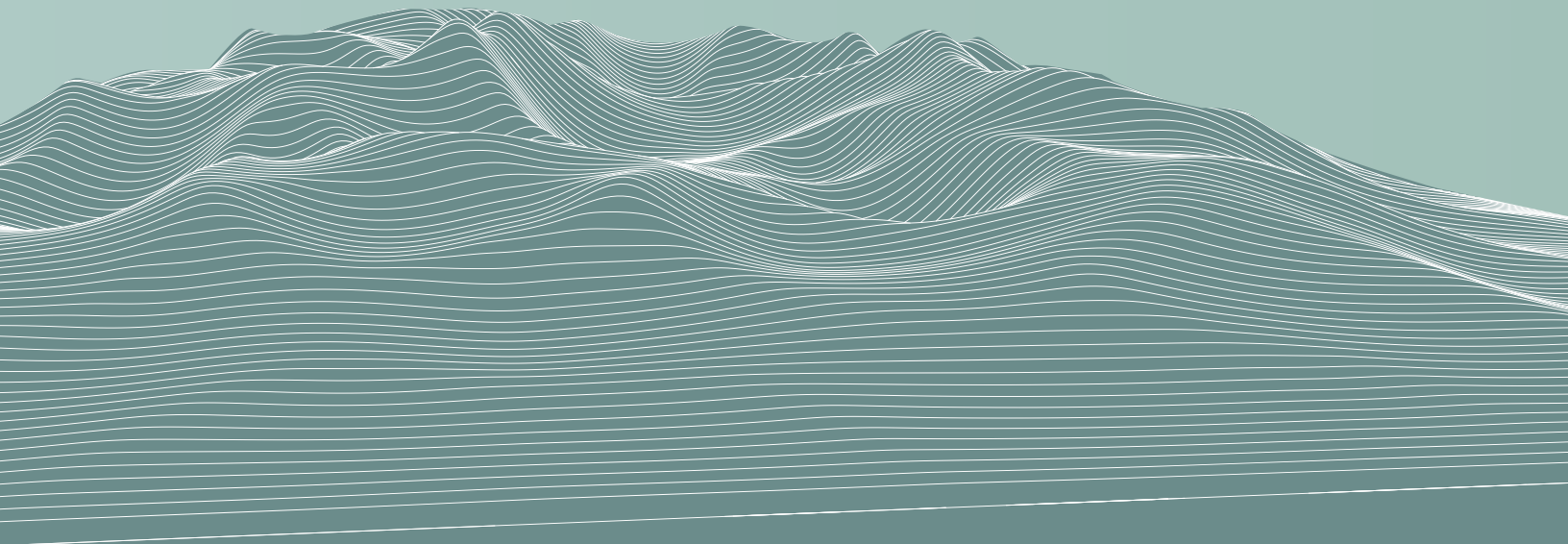
Facts & Figures | 2026

THE STATE OF CANADA'S MINING INDUSTRY



The Mining Association of Canada

The **Mining Association of Canada (MAC)** is the national organization of the Canadian mining industry. We represent companies involved in mineral exploration, mining, smelting, refining and semi-fabrication. Our member companies account for most of Canada's output of metals and minerals. MAC's functions include advocacy, stewardship and collaboration. Our goals are to promote the industry's interests nationally and internationally, to work with governments on policies affecting minerals, to inform the public and to encourage member firms to cooperate to solve common problems. We work closely with provincial and territorial mining associations, other industries, and environmental and community groups in Canada and around the world.



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Message from our CEO



I am pleased to share *The Mining Story 2026*, the Mining Association of Canada's annual roundup of statistics on the state of the industry.

The mining sector has been a continued success story for Canada. Our sector provides direct employment to 438,000 people in extraction, services, primary manufacturing and downstream manufacturing. The industry pays billions in taxes and royalties to governments, and makes major expenditures for project development and operation. We are a leader in Indigenous employment, providing 22,600 jobs in 2024.

In many ways, we find ourselves in a positive situation. Canada is a leading global producer of potash and uranium. Prices for minerals and metals reached new highs in 2025. We are now the fourth largest gold producer in the world, with Canadian production increasing at the same time that gold's value has soared. Demand for minerals and metals is projected to increase over the next decade from clean energy and defence applications. There is increasing interest in government support for and in mining projects, which has not been seen in decades outside of Quebec.

But the mining sector in Canada has not seen substantial growth in almost two decades. The inflation-adjusted sectoral GDP was the same in 2024 as it was in 2007. Over the same period, the larger Canadian economy grew by a third, which means that the fraction of the economy made up by mining has been shrinking. Production of key minerals and metals has declined over the past decade: copper production is down by 23%, nickel production is down by 44%, and iron ore production is down 6% since 2015.

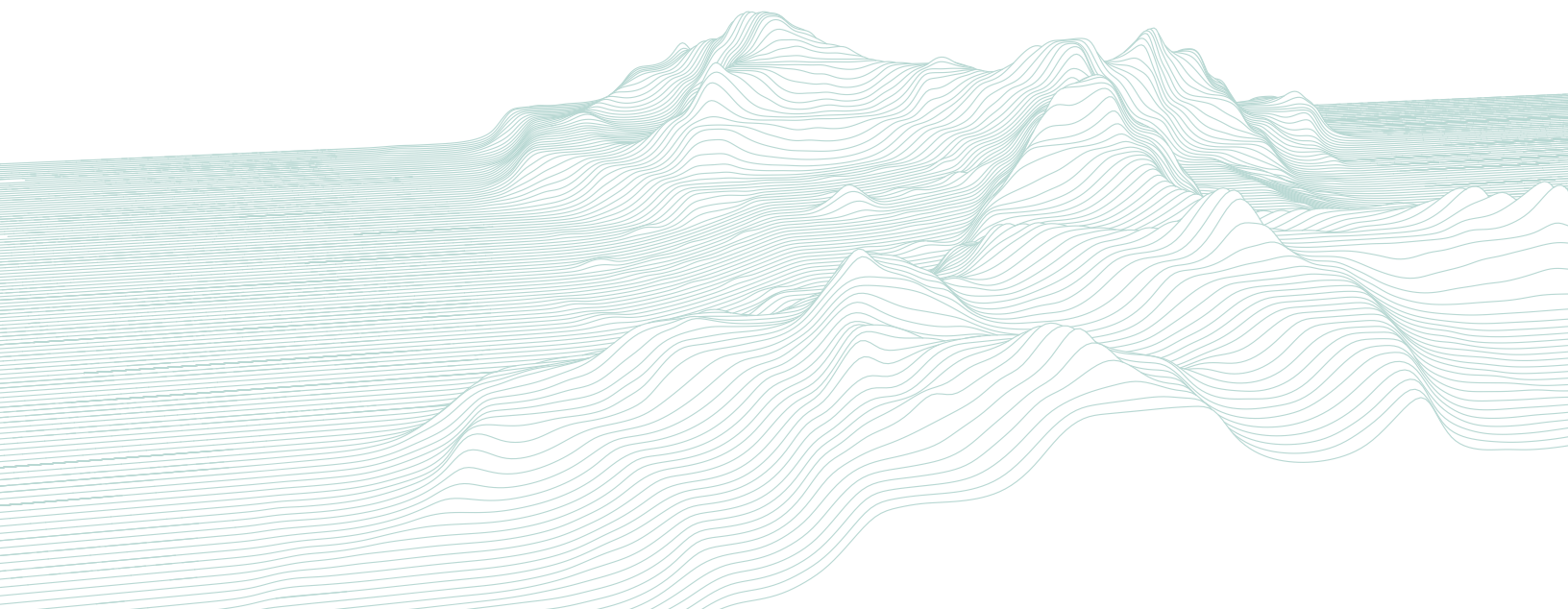
Fortunately, there are opportunities for us to grow. Canada and its allies need to mine and refine more minerals and metals to address our geopolitical vulnerabilities and support the world's energy transition. Advancing mining projects is key to diversifying our economy, building resilience against global shocks, and boosting long-term productivity. Unlocking new projects will expand our industrial base, create high-quality jobs, and reinforce Canada's role as a global supplier of minerals and metals.

I am encouraged by the Government of Canada's recent commitment to the sector. New tax credits and incentives should encourage investment. Investments in infrastructure like roads and power corridors will support the development of new mines across the country. In order to fully realize our potential, though, the mining industry needs the full commitment of all federal, provincial and territorial governments. This means modernizing the mining regulatory regime to eliminate duplication and to ensure that processes are efficient and effective while maintaining high environmental standards and respecting Indigenous rights.

A robust mining sector will help Canada reduce its reliance on imports, drive industrial growth, and open new opportunities. It will sustain domestic industries and supply the materials needed for the global clean energy transition. In short, fully leveraging our mineral wealth will build a more resilient, competitive, and productive economy – and secure Canada’s place as a global leader and supplier of choice.

Pierre Gratton
President and CEO, Mining Association of Canada

“ Canada and its allies need to mine and refine more minerals and metals to address our geopolitical vulnerabilities and support the world’s energy transition.



Executive Summary

Canada's mining industry is a global leader in producing responsibly mined, low-carbon minerals and metals. Canada produces 60 minerals and metals. It is the world's top producer of potash, the second largest producer of niobium and uranium, and the third largest producer of cadmium and palladium. Products of Canada's mines are used to make steel for buildings, to build batteries for laptops and cars, to increase crop yields, and to provide affordable energy.

The current state of **mining and the Canadian economy** is stable. The mining sector contributed \$111 billion to Canada's gross domestic product in 2024, or 3.6% of the total value. In inflation adjusted terms, the value of mining's contribution has been steady for two decades.

In 2024, Canada produced diamonds, gold, coal, potash, iron ore and other critical components for the global economy through **mining activities**. The total value of Canadian mineral production in 2024 was \$64.3 billion, a decrease of almost 20% from its high in 2022. Since 2015, production of five of the top ten minerals and metals has declined, even as the value of production has increased by 60% due to rising prices.

The **people** of mining are diverse: they come from all corners of the country and all educational backgrounds. The mining industry directly employed 438,000 people in 2024. Including indirect employment, the sector employed 710,000 people. This represents one in 31 Canadians in the labour force. The minerals industry is an important employer of Indigenous peoples, providing 22,600 jobs in 2024, a number that has steadily grown over the past decade. The mining industry is justifiably proud of its safety record. Over the past decade, rates of lost time injury have fallen by 16% and rates of fatal injury have fallen by 22%.

The Canadian mining industry is committed to **environmental protection**. The mining industry spent \$2.7 billion on environmental protection activities in 2022, almost a quarter of all environmental expenditures across industries tracked by Statistics Canada. The minerals and metals produced by the sector will help the world transition to a low-carbon future. Battery deployment, electrical grid expansion, construction and permanent magnets are expected to drive demand.

Canada's mining sector is a leader in the **world**. Mineral exports make up a substantial portion of all goods exported: Canada's \$152 billion in mining exports in 2024 was 21% of the value of all merchandise exports. Gold has become increasingly important: in the first ten months of 2025, Canada's gold exports were worth an average of \$4.3 billion every month.

Canada's largest export markets for minerals and metals in 2024 were the United States (51% of minerals and metals exports), the United Kingdom (15.6%) and the European Union (7.7%).

Canada imported \$126 billion of minerals and metals in 2024. The major sources of imports were the United States (45.8% of minerals and metals imports), China (11.9%) and the European Union (9.0%).

Export licensing, tariffs and outright bans have created turbulence in global minerals markets in recent years. Because extraction and processing capabilities are heavily concentrated in a few countries, restrictions on trade can cause shortages or price spikes in key industries like clean energy and defence.

The G7, along with other allies, have joined Canada in prioritizing reliable sources of critical minerals in an increasingly uncertain global environment. This search for raw and refined materials in allied countries is an opportunity for Canada. Canadian refined metals have a low carbon footprint. Canada's high social, environmental and governance standards align with requirements for procurement in other countries.

Canada must act quickly to take advantage of these strengths. The federal government should speed up mine approvals, build trade-enabling infrastructure and provide competitive fiscal tools to attract private investment to the mining sector.

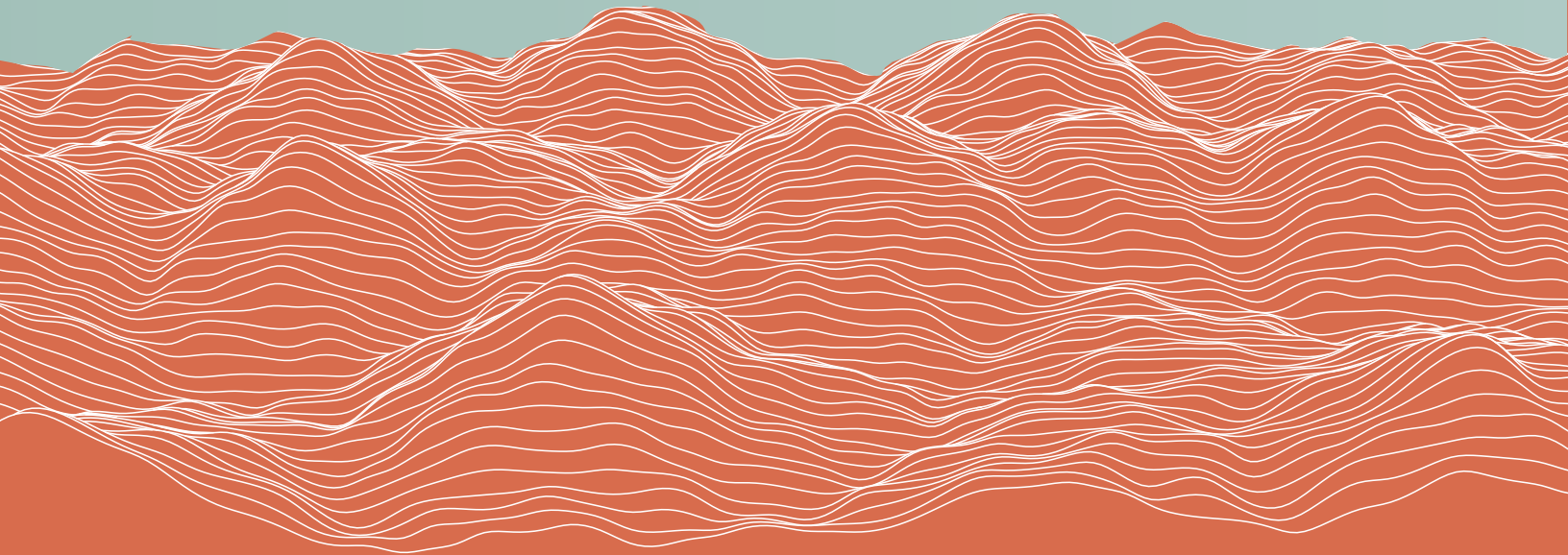
To support exploration, Canadian governments should undertake comprehensive mineral resource assessments, based on geoscientific studies, in order to understand and incorporate the value of mineral potential into regional assessments and land management decisions. This is particularly true of northern Canada, where the potential for new discoveries is high.

The 2025 federal budget expanded eligibility for exploration and clean technology tax credits, and accelerated capital investment expensing in mining. These measures will encourage the extraction and processing of minerals required for defence, semiconductors, and clean technologies. The key to the success of the federal budget will be the speed and effectiveness of its implementation. Future measures such as including technical studies in the Canadian Exploration Expense and making development costs for brownfield mine expansions fully eligible for tax credits will build on the success of the budget.

New mines in Canada must still navigate complex layers of regulatory approvals before production. Mining projects are subject to comprehensive provincial regulatory frameworks, federal impact assessment regulations, and specific federal regulatory approvals. While important reforms have been initiated to shorten timelines, Canada must continue to improve its performance. Federal-provincial coordination, internal cooperation between federal departments, process improvements in approvals, improving consultation, and making technical legislative improvements where warranted are all required.

SECTION 1

The Canadian Mining Industry: Contribution to the Economy



MINING: A PAN-CANADIAN INDUSTRY

Mining is a significant contributor to the Canadian economy and takes place in communities from coast to coast to coast. The sector provides wages and employment for more than 710,000 people, of whom 438,000 are directly employed in extraction, services, primary manufacturing and downstream manufacturing. The industry pays billions in taxes and royalties to governments, and makes major expenditures for project development and operation.

Figure 1 illustrates the location of Canada’s mining clusters and active mineral development regions. Details for individual mines are presented in Annex 1. Mineral production by province and territory is presented in Annex 2.

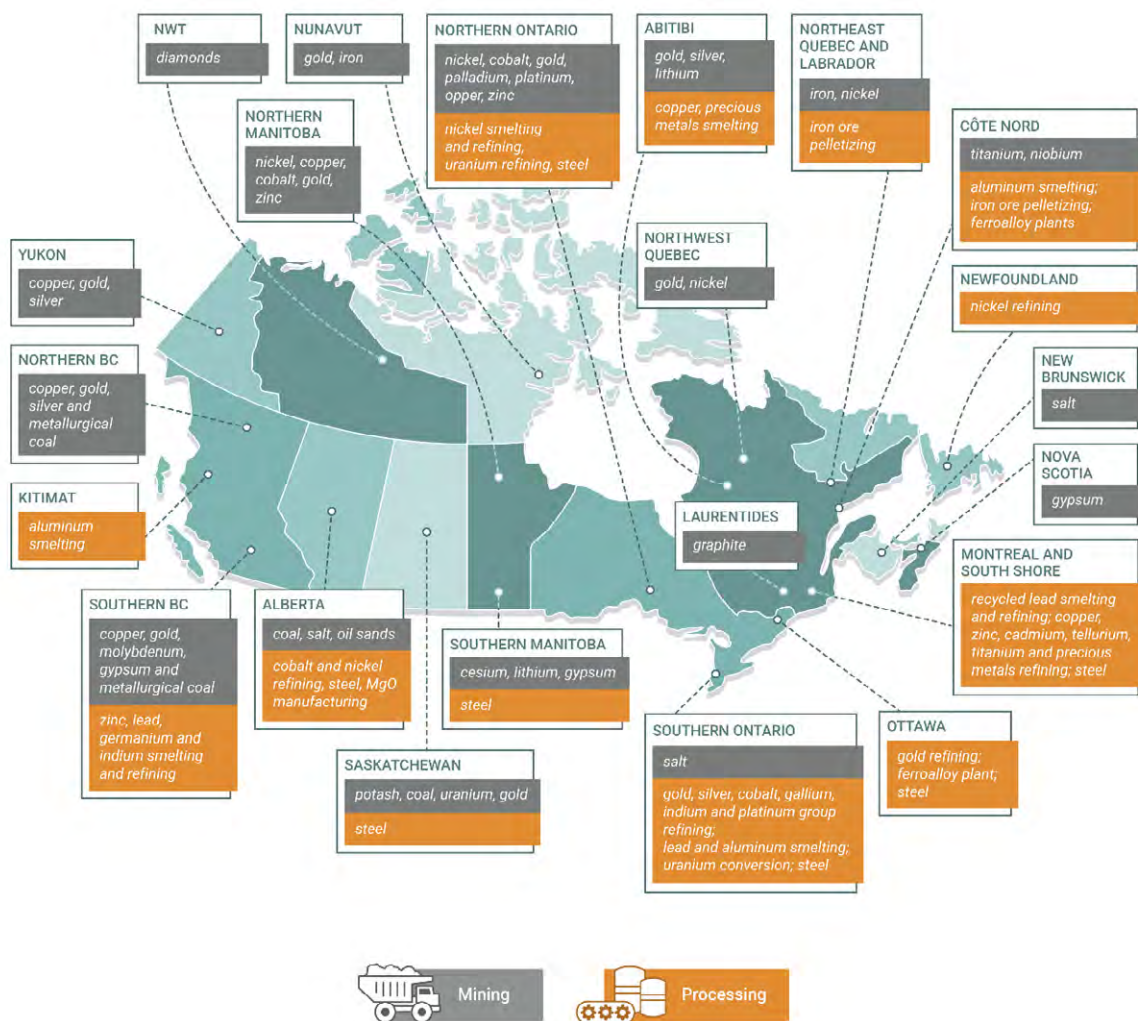


Figure 1: Mining and Processing in Canada

The total value of mineral production in Canada in 2024, excluding coal, was \$54.7 billion. Coal added a further \$9.7 billion for a total value of \$64.3 billion.

Pacific Region

British Columbia produced \$6.2 billion of minerals and metals (excluding coal) in 2024.¹ Production values for 2024 are forecasted or preliminary, and there may be differences in data sources and methodology between provincial and federal data. In this case, British Columbia recorded a higher production value of coal (\$10.3 billion) for 2024 than the entire national production value calculated by Statistics Canada (\$9.7 billion).

The mining sector accounted for 3.1% of British Columbia's Gross Domestic Product (GDP) in 2024.² There were 25 operating mines in British Columbia in 2024.³

Natural Resources Canada is tracking 37 major mining projects in British Columbia, including six that are already under construction.⁴ In total, the projects represent \$35.5 billion in potential investment.

The Prairies

The mining, quarrying and oil and gas sector makes up about 18% of Alberta's GDP.⁵ About 20% of Alberta's oil sands are within 70 metres of the surface and can be recovered by surface mining using excavators, trucks and crushers. Alberta also produces industrial minerals like limestone, dolomite and salt. Industrial mineral production also results in useful byproducts such as sulfur, fly ash and placer gold.

Saskatchewan is the world's largest potash producer and has almost half of the world's potash reserves. It is home to the world's largest uranium mine and is the world's second largest primary uranium producer. Saskatchewan also produces gold, coal, sodium sulphate and clays.

Since 2020, the Saskatchewan Research Council has been building North America's first integrated rare earth element processing facility, scheduled to be operational in 2027. The facility will produce neodymium-praseodymium (NdPr) metals, which are used to make high-strength permanent magnets. The facility will initially use feedstock imported from Brazil, South Africa and Vietnam, allowing Canada to build separation and metal-making capacity before domestic rare earth element mines come online.

Manitoba's prolific Winnipeg-Cat River pegmatite field contains a very large lithium-cesium-tantalum deposit. Manitoba had one of Canada's two active lithium mines in 2024. The mine is also one of the few global sources of cesium. Mines in northern Manitoba produced both base and precious metals.

In 2024, there were 20 operating mines in Alberta, 21 in Saskatchewan, and eight in Manitoba.

1 Clarke, G., et al., 2025. Exploration and Mining in British Columbia, 2024. British Columbia Ministry of Mining and Critical Minerals, British Columbia Geological Survey GeoFile 2025-01 (poster). Because these British Columbia statistics are from a different source than the others in this chapter, numbers (e.g. for metallurgical coal production) may not agree exactly with the larger Canadian values.

2 Statistics Canada. [Table 36-10-0711-01](#), Gross domestic product (GDP) at basic prices, by industry, provinces and territories (x 1,000,000). Using the Natural Resources Canada definition of the mining sector, which includes North American Industry Classification System (NAICS) codes 212, 327, 331 and 332. Where the data is available, this report also includes support activities for mining, NAICS 21311B. Other provincial and territorial data also obtained from this source.

3 A list of producing mines in 2024 is provided in Appendix A. This list is maintained by Natural Resources Canada.

4 From Natural Resources Canada's [Major Projects Inventory](#). The inventory "provides a snapshot of major natural resource projects in Canada that are either currently under construction or are planned within the next 10 years...To be included in the inventory, projects in the energy and mining sectors must meet a minimum capital worth threshold of \$50 million."

5 Statistics Canada. [Table 36-10-0711-01](#). Gross domestic product (GDP) at basic prices, by industry, provinces and territories (x 1,000,000).

The mining sector accounted for 8.8% of Saskatchewan's GDP, 3.7% of Manitoba's, and 1.9% of Alberta's GDP (excluding oil sands-related extraction) in 2024.

Natural Resources Canada is tracking 19 major mining projects in the Prairies: four in Alberta, 11 in Saskatchewan, and four in Manitoba. Three of these projects were reported to be under construction in 2024: two potash mines and a lithium mine in Saskatchewan. The McIlvenna Bay copper project also began construction in Saskatchewan in 2024. In total, the projects represent \$23 billion in potential investment.

Ontario

Ontario produced \$13.0 billion of minerals and metals (excluding coal) in 2024.⁶ The mining sector contributes about 3.5% to Ontario's GDP.

Toronto is a global centre of mining finance. Between the TSX and the TSX Venture, Canadian exchanges have more than a thousand mining issuers with a combined market capitalization of \$980 billion.⁷ The fact that Canada is a key player in mining finance means that professional services related to mining and mining finance have had a chance to develop around the exchanges.

There were 53 producing mines in Ontario in 2024. Base metals mines are concentrated around Sudbury, industrial minerals mines are found in southern Ontario, and precious metals mines are primarily in northern Ontario.

Natural Resources Canada is tracking 26 major mining projects in Ontario: 17 are planned and nine are already under construction. In total, the projects represent \$20.3 billion in potential investment.

Quebec

Quebec produced \$11.9 billion worth of metals and non-metals in 2024. The mining sector contributes 4.9% to Quebec's GDP.

There were 32 producing mines in Quebec in 2024. The mines were concentrated in three regions: gold mining in Abitibi-Témiscamingue, iron mining on the North Shore, and gold, base metals, diamonds, and iron mining in Nord-du-Québec.

Natural Resources Canada is tracking 31 major mining projects in Quebec, six of which are already under construction. In total, the projects represent \$23.6 billion in potential investment.

Atlantic Region

In 2024, there were five operating mines in Newfoundland and Labrador, five in Nova Scotia, and six in New Brunswick. Prince Edward Island is Canada's only province or territory without an operating mine.

Mining, quarrying and oil and gas extraction were responsible for 7.6% of Newfoundland and Labrador's GDP, 1.7% of New Brunswick's, 1.1% of Nova Scotia's and 1.0% of Prince Edward Island's GDP in 2024.

Natural Resources Canada is tracking 15 major mining projects in the Atlantic provinces. One of these projects is under construction. In total, the projects represent \$7.4 billion in potential investment.

6 Preliminary data for 2024 for Ontario (and some other provinces and territories, where data is not suppressed) from Statistics Canada and Natural Resources Canada's [Annual Statistics of Mineral Production, 2024](#). Data are preliminary.

7 TMX Group. [The MiG Report](#). October 2025.

The North

Mining is the largest economic driver in Canada's North. The mining sector was responsible for 5.3% of the GDP in the Yukon, 13.3% of GDP in the Northwest Territories, and 36.7% of GDP in Nunavut. The mines operating in the Northwest Territories and Nunavut are the largest private sector contributors to each territory's economy.

In 2024, there were three diamond mines operating in the Northwest Territories. In Nunavut, there were three gold mines and one iron mine in operation. Yukon had two operating mines in 2024: one gold, and one silver-lead-zinc mine.

Yukon produced \$500 million worth of metals and non-metals in 2024. The Northwest Territories produced \$1.4 billion of diamonds. Data for Nunavut were not available.

Natural Resources Canada is tracking 18 major mining projects in the north: four in Yukon, five in the Northwest Territories, and one in Nunavut. The Nunavut project is under construction. In total, the projects represent \$7.3 billion in potential investment.

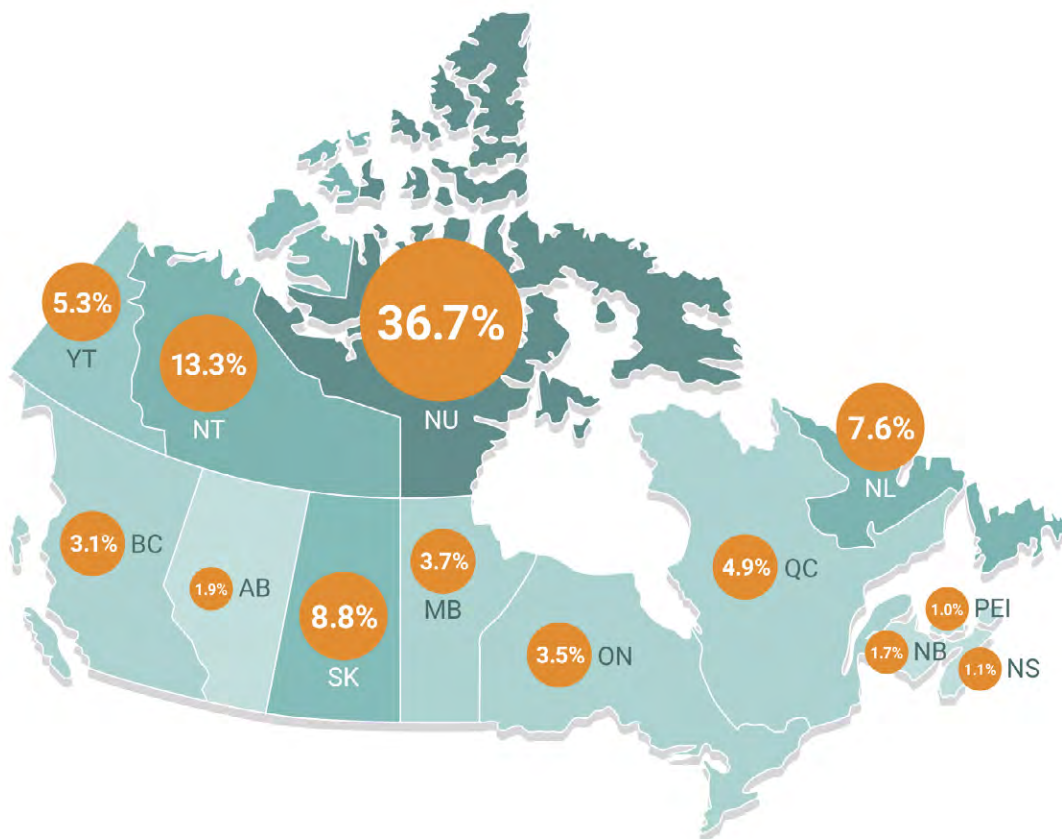


Figure 2: The Mining Sector as a Percentage of Provincial/Territorial GDP Across Canada⁸

⁸ Statistics Canada. [Table 36-10-0711-01](#), Gross domestic product (GDP) at basic prices, by industry, provinces and territories (x 1,000,000).

INDIRECT EFFECTS

Resource wealth has built communities and infrastructure across the country. Mines create jobs and make direct payments to government through taxes and royalties.

But the mining industry’s economic impact far surpasses its direct contribution to GDP.

Rail companies Canadian National (CN) and Canadian Pacific Kansas City (CPKC), and the Ports of Montreal, Quebec and Vancouver rely on a vibrant mining industry. Specialist firms, including those in the legal, environmental, taxation, engineering, and other fields, support the industry’s many requirements to locate, develop, construct, operate and reclaim a mine. These supply relationships are mutually beneficial.

Clusters of expertise, like those in finance, geology and exploration noted above, create opportunities for other companies outside the mining sector.

A recent study⁹ examined the potential economic effects of proposed critical mineral, precious metal and steelmaking coal mines in British Columbia. The study broke down expected growth into direct impacts (from mine construction and operation), indirect impacts (at suppliers, via spending on goods and services) and induced impacts (in the broader economy, through increased spending by the employees of mining companies and their suppliers).

The study looked at 18 critical mineral, six precious metal, and three steelmaking coal mine development projects in BC, all of which are at an advanced stage of development. The study found that constructing the mines would affect GDP through direct (37%), indirect (36%) and induced (27%) pathways. Over the operational life of the mines, GDP impacts were mostly direct (48%), although with substantial indirect (33%) and induced (19%) impacts as shown in Figure 3.

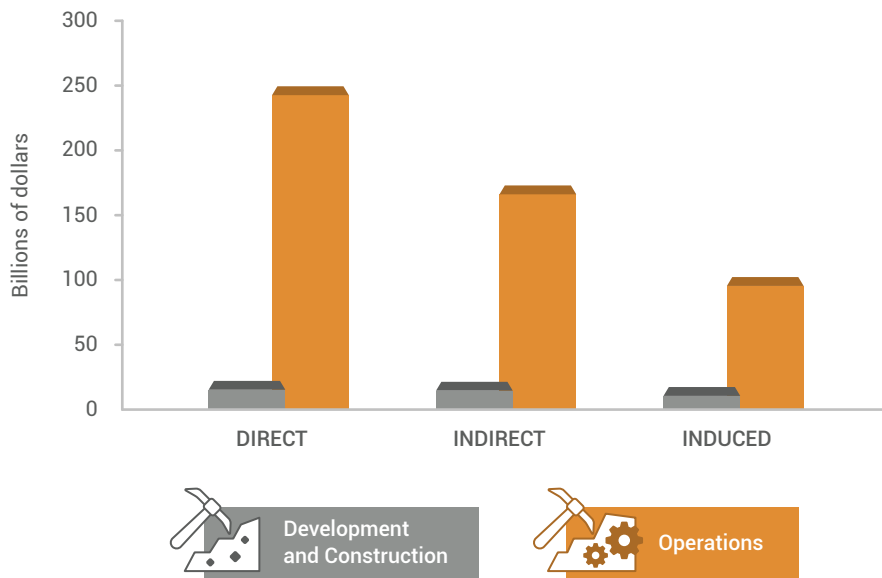


Figure 3: GDP Impact of Potential Mine Development, Construction and Operations in British Columbia

9 Mansfield Consulting Inc. for the Mining Association of British Columbia. [Economic Impacts of Proposed Critical Mineral, Precious Metal, and Steelmaking Coal Mines in BC](#). May 1, 2025.

CANADIAN MINING INDUSTRY ECONOMIC OUTLOOK

The mining sector has not seen substantial growth in almost two decades. In 2007, the inflation-adjusted sectoral GDP was \$69.5 billion. Seventeen years later, the sector’s contribution to GDP remained \$69.5 billion.¹⁰ There were notable drops after the 2008 financial crisis and the 2020 Covid year, but the total value has been consistent.

Over the same period, the larger Canadian economy has grown by a third. This means that the percentage of the Canadian economy made up by mining has been steadily shrinking, from 3.31% in 2017 to 2.84% in 2024 as shown in Figure 4.

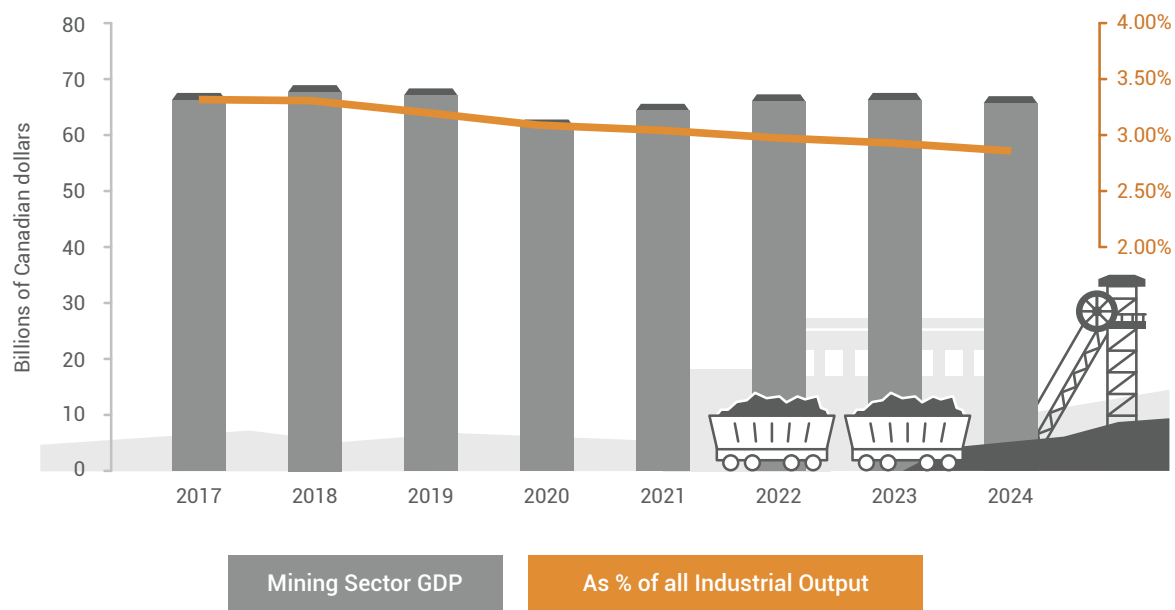


Figure 4: Mining Sector GDP Over Time (2017 Constant Prices)¹¹

Excluding oil and gas, mining’s contribution to GDP can be separated into four components: extraction, services, primary manufacturing, and downstream manufacturing. The gross value added for each category is shown in Figure 5.

¹⁰ Statistics Canada. [Table 38-10-0285-01](#). Natural resources satellite account, indicators (x 1,000,000).

¹¹ Statistics Canada. [Table 36-10-0434-03](#). Gross domestic product (GDP) at basic prices, by industry, annual average (x 1,000,000)

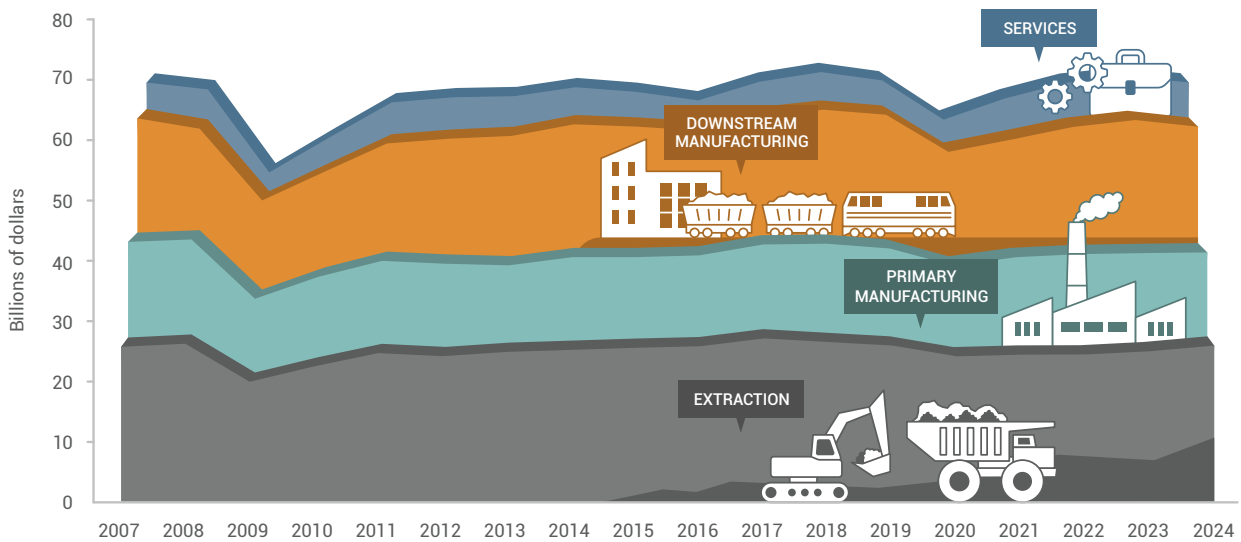


Figure 5: Real Gross Value Added, Mining Sector¹²

Extraction includes the mining of metals, non-metals, and coal. Metals mining, including gold, iron ore, copper, and zinc, contributed \$32.0 billion to Canada's GDP at current values in 2024.¹³ Non-metal mining includes diamonds, potash and sand and gravel. The gross value added of non-metallic mineral production was \$15.3 billion in 2024. Canada produces both coal for generating heat and energy (thermal coal) and coal for industrial processes like making steel (metallurgical coal). Coal production added \$5.1 billion to Canada's GDP in 2024.

In the mining context, **services** means activities including exploration drilling on contract, and contracted services at mines such as water removal or overburden removal. The nominal gross value added for mining services in 2024 was \$9.1 billion.

Primary manufacturing for metals includes smelting and refining activities. Primary manufacturing for non-metals includes manufacturing using lime, cement, concrete, and glass. In 2024, the gross value added by primary manufacturing was \$22.1 billion.

Downstream manufacturing uses primary manufacturing products as inputs. Secondary metal products use primary products to produce things like iron and steel pipes, rolled steel products like wire, and foundry products. Tertiary metals products include things like cutlery, tools and hardware that require further processing. Downstream manufacturing also includes miscellaneous metals products such as communications cables and stamped motor vehicle components. Finally, services and custom work refer to specialized activities like heat treating, engraving, coating, or other custom work. The total value of downstream manufacturing in Canada's GDP in 2024 was \$27.1 billion.

Mining remains one of the more productive sectors of the Canadian economy. Statistics Canada measures labour productivity by calculating the ratio of real value added and hours worked. Extraction (i.e., mining and quarrying, NAICS 212) has a more productive labour force than most other sectors, as shown in Figure 6.

¹² Statistics Canada. Table 38-10-0285-01. [Natural resources satellite account, indicators \(x 1,000,000\)](#). Using 2017 constant prices.

¹³ That is, in current dollars, not adjusted for inflation. Inflation-adjusted values like those used for Figure 5 are lower as they are deflated to 2017 prices.



Figure 6: Labour Productivity, Selected Sectors in 2017 Dollars Per Hour¹⁴

While still higher than most other sectors, labour productivity for mining and quarrying has plateaued after a sharp decline in the first decade of the century, as shown in Figure 7.

¹⁴ Statistics Canada. Table 36-10-0480-01. Labour productivity and related measures by business sector industry and by non-commercial activity consistent with the industry accounts.

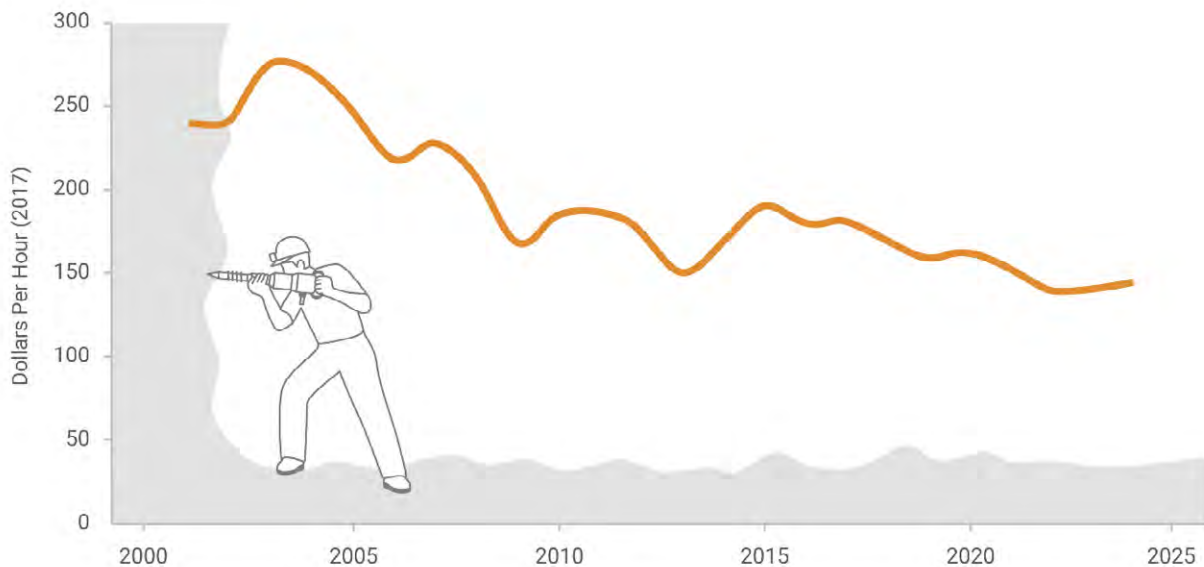


Figure 7: Labour Productivity, Mining and Quarrying

LOOKING FORWARD

Recent economic projections¹⁵ have revised Canada's economic growth downward for 2025. Tariffs, uncertainty and weaker demand have meant a reduction in the projected growth rate for 2025 and 2026.

Increases in productivity are the key to unlocking sustainable growth for the future. While the mining sector is more productive than many other sectors of the Canadian economy, there are opportunities for improvement. Declining productivity over the last two decades can, and should, be improved.

Investments by governments, mining companies and venture capital will help the mining sector be a driving force of the Canadian economy for many years to come.

Investing in Infrastructure

Investing in infrastructure serves Canada's economic objectives by opening new areas to investment, creating jobs, and increasing the quality of life in remote communities. These investments also serve national security objectives by creating or enhancing dual-use civilian and defence infrastructure.

The urgency of addressing climate change, the need for materials to support technological evolution including the transition to electric vehicles, and Canada's need for a globally oriented export economy also highlight the need for new mines and infrastructure projects. These new projects are often in areas that are difficult to reach, and require access roads, communications networks and power supplies to be developed in new areas.

¹⁵ Bank of Canada. [Projections: Monetary Policy Report](#). October 2025.

The Mining Association of Canada is encouraged by measures introduced in the Government of Canada's 2025 budget.

The new Critical Minerals Sovereign Fund plans to provide \$2 billion over five years, beginning in 2026-27. According to the government's 2025 budget, the fund will make strategic investments in critical minerals projects and companies, including equity investments, loan guarantees, and offtake agreements.

Another measure from the 2025 budget, the First and Last Mile Fund, is designed to support the development of upstream and midstream critical minerals projects. This fund's focus will be on helping advanced projects move into production. The First and Last Mile Fund will absorb the Critical Minerals Infrastructure Fund and its existing funding envelope to provide up to \$1.5 billion in support through 2029-30.

Reducing Regulatory Friction

Investors and mining companies are interested in investing in new mines, expanding existing mines, and building the refining and smelting capacity that Canada requires to be a leader in sustainable mining. Unfortunately, regulatory friction can slow the momentum of these projects. Federal and provincial impact assessment processes can require duplicative work, routine activities can require voluminous studies and documentation, and uncertainties in regulatory interpretation mean that mining companies and others face substantial legal risk.

Mining projects are subject to comprehensive provincial regulatory frameworks that are unique to each province, covering the full life cycle of a mine, from exploration through development, operation, closure, and reclamation. These frameworks consider environmental effects and potential impacts on Indigenous peoples, incorporate Indigenous engagement and consultation, and include environmental protection regulations and permits of general application, as well as regulations and permits specific to mining.

Mining projects can also be subject to federal requirements: the *Impact Assessment Act*, the *Fisheries Act*, the *Canadian Navigable Waters Act*, and the *Metal and Diamond Mining Effluent Regulations*. All mines must comply with relevant general federal legislation such as the *Explosives Act*, the *Species at Risk Act*, the *Migratory Birds Convention Act*, and the *Canadian Environmental Protection Act*. Uranium mines are further regulated by the Canadian Nuclear Safety Commission.

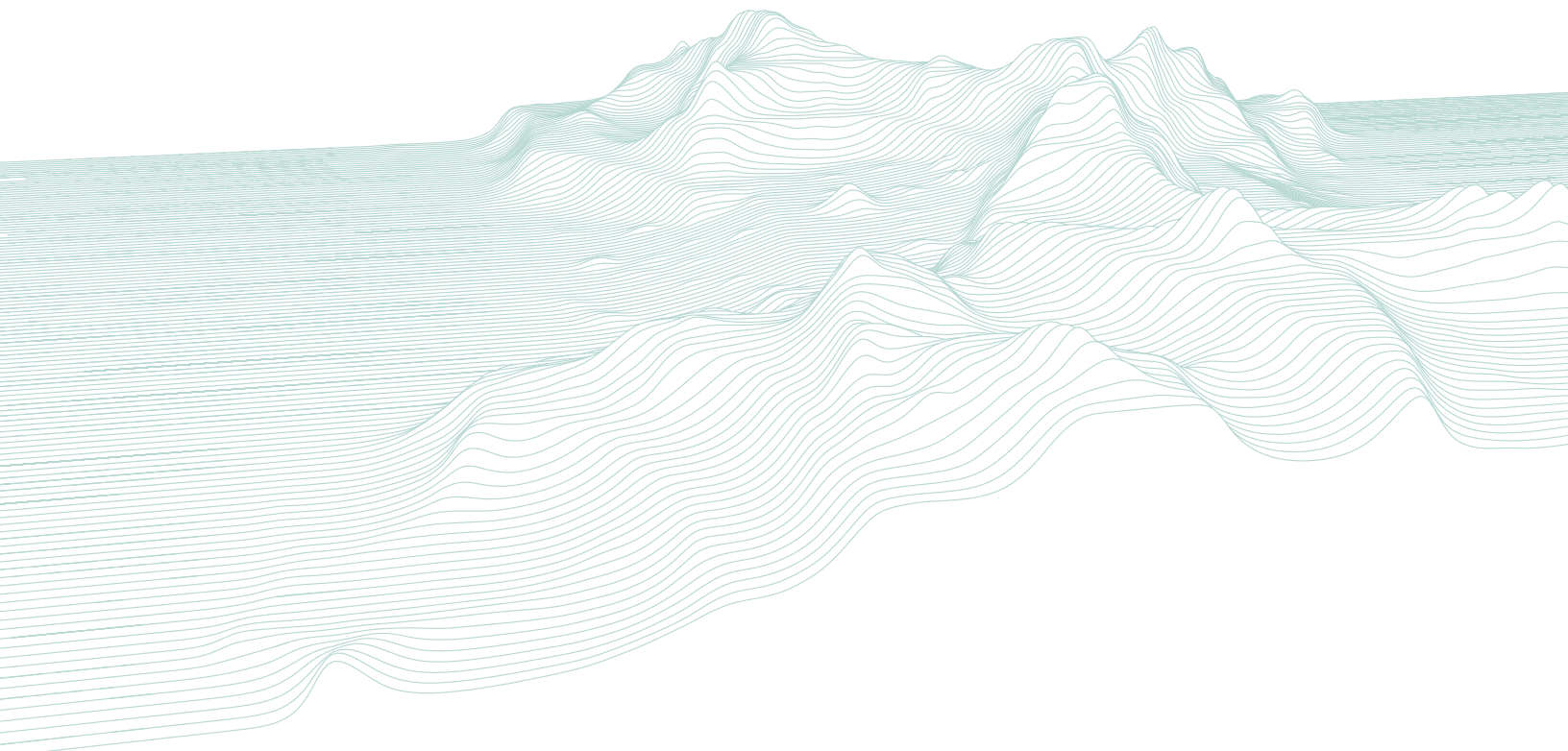
The time between when a mining project is proposed and when construction can begin is dictated by the sum of all the federal and provincial approval processes it must navigate. The multiplicity of government entities involved in mining projects results in duplication and conflicting requirements.

The Mining Association of Canada has welcomed the Major Projects Office, launched in 2025 by the Government of Canada to provide leadership on projects of national significance, including trade-enabling infrastructure. One goal of the Office is to make regulatory processes more efficient, so that major projects are reviewed, start to finish, within two years.

This search for efficiencies should extend well beyond the few projects selected by the Major Projects Office. Canada needs to build at a rate not seen for generations, and this will require the efficient permitting and approval of projects, both large and small. While there has historically been limited coordination between federal, provincial and territorial governments, progress has been made over the course of 2025 to improve regulatory efficiency and collaboration, including through the development of several federal-provincial cooperation agreements.

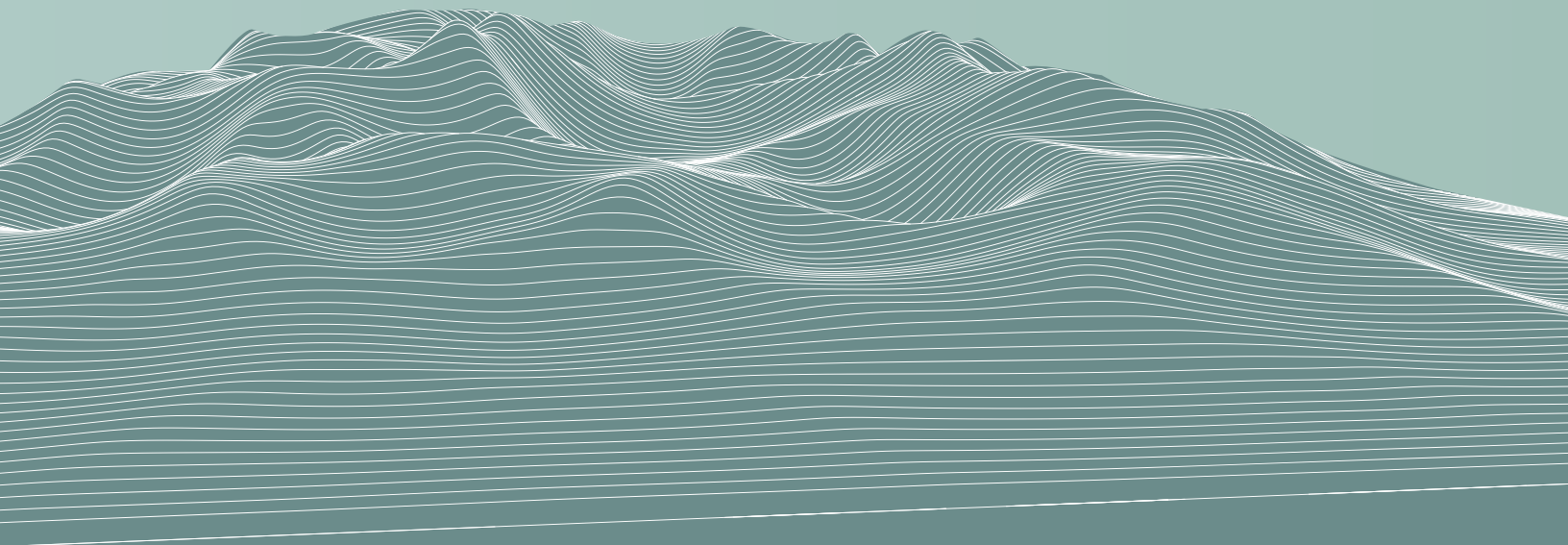
Strengthened collaboration should remain a priority for all levels of government. Provincial assessment and permitting already requires robust environmental analysis and includes requirements for Indigenous consultation. Better alignment can cut delays without compromising oversight of mining projects.

Internally, the federal government can also improve its processes. By integrating reasonable information gathering and Indigenous consultation required by impact assessments, the *Fisheries Act*, the *Canadian Navigable Waters Act* and Schedule 2 of the *Metal and Diamond Mining Effluent Regulations*, the post-assessment approval timeline can be reduced to less than a year.



SECTION 2

The Activities: Production, Processing and Transportation



Canada is a globally important producer of minerals and metals. Our strength rests on our efficient extraction, processing and transportation of products to markets in Canada and around the world.

MINERAL PRODUCTION

Canada has historically been among the top producers of metals and non-metallic minerals in the world. It is the top producer of potash, second largest producer of niobium and uranium, and third largest producer of cadmium and palladium (by metal content).

Canada's production and global rank as a producer in 2014 and 2024 for selected high value metals and non-metals is shown in Figure 8. Data from Canada's largest global competitor for each commodity is also presented for comparison.



Figure 8: Canada's Global Rank for Its Largest Value Minerals and Metals, 2014 and 2024¹⁶

16 Data from the National Minerals Information Centre of the United States Geological Survey. [Commodity Statistics and Information](#). Data for 2024 also presented in Annex 3 with global rankings.

Canada produces 60 minerals and metals and is among the top ten producers in the world for 31 of those. The preliminary estimate for Canada's metals production in 2024 is up 1.1% from 2023, to \$38.4 billion. The value of nonmetals production decreased 18.6% to \$16.3 billion. In 2024, coal production was down 22.6% to \$9.6 billion. The total value of Canadian mineral production in 2024 was \$64.3 billion, down from a high of \$79.2 billion in 2022 as shown in Figure 9.

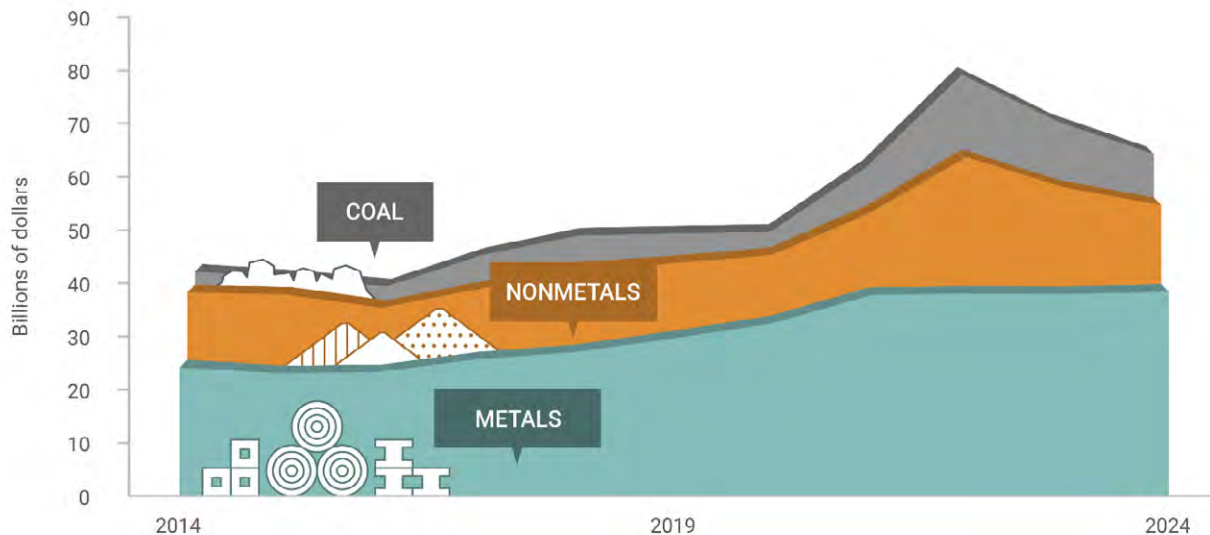


Figure 9: Value of Canadian Mineral Production, 2014-2024¹⁷

Canada's top 10 minerals and metals (see Figure 10) each had projected production values of more than \$1 billion in 2024. Gold alone was valued at almost \$17 billion. Canada's mineral production 2014-2024 is presented in Annex 5.

Since 2015, production quantity of at least five of the top ten minerals and metals has declined. Increases in commodity prices since that time have mitigated some of the decline in nominal value, but copper, nickel, stone and diamonds all have lower production values now than they did a decade ago.

¹⁷ Sources: Natural Resources Canada; Statistics Canada. Data for 2024 are preliminary. This table includes the production of coal but excludes the production of petroleum and natural gas. Numbers may not add to totals due to rounding. As of 2017, Statistics Canada is no longer conducting the monthly survey of cement, and values are no longer included in Canada's mineral production. Cement production has also been excluded from 2000 to 2016 values for comparability.











Minerals	Unit of Measure	2015		2024		Change 2015-2024	
		Qty	\$Value (M)	Qty	\$Value (M)	Qty	\$Value
 Gold	tonnes	161	7,667	199	16,890	+24%	+120%
 Coal	kilotonnes	61,985	3,127	42,544	9,663	-31%	+209%
 Potash	kilotonnes (muriate of potash)	11,462	6,133	25,463	8,679	+122%	+42%
 Iron ore	kilotonnes	46,220	2,855	43,643	5,581	-6%	+95%
 Copper	kilotonnes	697	4,906	535	4,504	-23%	-8%
 Uranium	tonnes	13,279	1,609	13,479	3,137	+2%	+95%
 Nickel	kilotonnes	225	3,408	125	2,760	-44%	-19%
 Sand and gravel	tonnes	228,030	1,885	242,834	2,619	+6%	+39%
 Stone	tonnes	158,034	1,688	118,110	1,507	-25%	-11%
 Diamonds	thousand carats	11,677	2,149	13,945	1,473	+19%	-31%

Figure 10: Mineral Production, Selected Minerals, 2015 and 2024¹⁸

OIL SANDS

The oil sands are the fourth largest proven oil reserve in the world, behind Venezuela, Saudi Arabia and Iran. Proven reserves are 159 billion barrels.¹⁹ About 80% of the oil sands lie too deep for mining and are recovered by in situ methods. The remaining 20% are within 75 metres of the surface and are accessible via mining techniques.

Mined oil sands are extracted with large excavators and off-road trucks. The trucks move the oil sands to crushers, and hot water is added to allow the resulting material to be pumped for further processing. In the extraction plant, more hot water is added to the mixture of sand, clay, bitumen, and water. The mixture is separated in a large vessel, and bitumen is removed, diluted and refined to prepare for upgrading.

¹⁸ Sources: Natural Resources Canada; Statistics Canada. For metals, the quantity refers to the recoverable metal in concentrates shipped. The quantity of potash reported for 2015 has been converted from K₂O to muriate of potash (MOP). As of 2019, iron ore only includes "Iron Ore Concentrates", since "Iron Ore agglomerates" is suppressed by the source.

¹⁹ Government of Alberta. [Oil Sands Facts and Statistics](#).

In 2024, the total raw bitumen produced by both in situ methods and mining was 565,400 cubic metres per day.²⁰ Of this, 273,400 cubic metres per day were produced by mining, or 48% of the total.

Most oil sands mines had increased levels of production in 2024, taking advantage of increased pipeline takeaway capacity.

Mined bitumen production is expected to continue to grow over the next decade: by 2034, mined bitumen production is forecast to be 288,800 cubic metres a day. According to the Alberta Energy Regulator, “most of the near-term growth will come from existing facility optimization due to increased productivity, improved market access, and relatively favourable market conditions...No new greenfield mines are expected to be constructed or become operational within the forecast period.”

PROCESSING MINERALS

Once materials are mined, they must be processed to obtain a product that is useful to the customer. This processing may include:

- Smelting, which removes metal from ore by heating it, often in the presence of other materials to oxidize or reduce the target metal.
- Secondary smelting, which is similar, but uses recycled material as a feedstock rather than mined ore.
- Refining, which removes impurities from metals by chemical or physical processes.

Canada has a significant mineral-processing industry, with 14 refineries, 13 smelters, five secondary smelters, one conversion facility, and four plants operating in 2024. Canada’s processing industry is shown in Figure 11.

20 Statistics for oil sands mining and the basis for this discussion are from Alberta Energy Regulator. [Alberta Energy Outlook | ST98 | 2025](#).

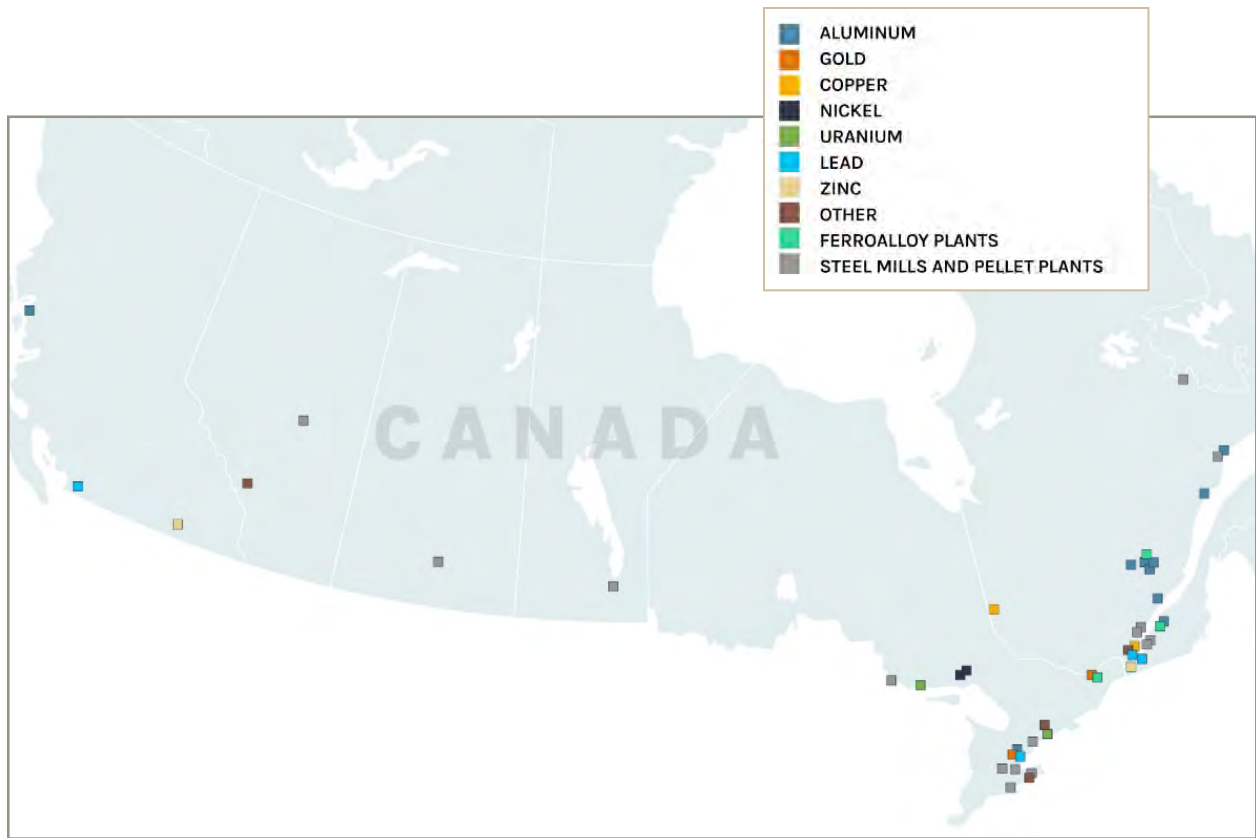


Figure 11: Non-Ferrous Smelters, Refineries, Plants and Conversion Facilities in Canada²¹

Canada’s integrated smelters and refineries were originally built near mines, which were mostly inland, without access to affordable marine transport. As local ore reserves become depleted and the production of base metal concentrate declines, these smelters and refineries must move from integrated production to the more expensive custom treatment of concentrates imported from other countries.

Of the six provinces where non-ferrous smelting and refining occur, only Alberta and Newfoundland and Labrador have avoided losing a facility since 2016. This has resulted in significant production capacity losses, as shown in Figure 12.

21 Source: Natural Resources Canada. [Canada’s Minerals and Mining Map](#), Layer: Smelters and Refineries.

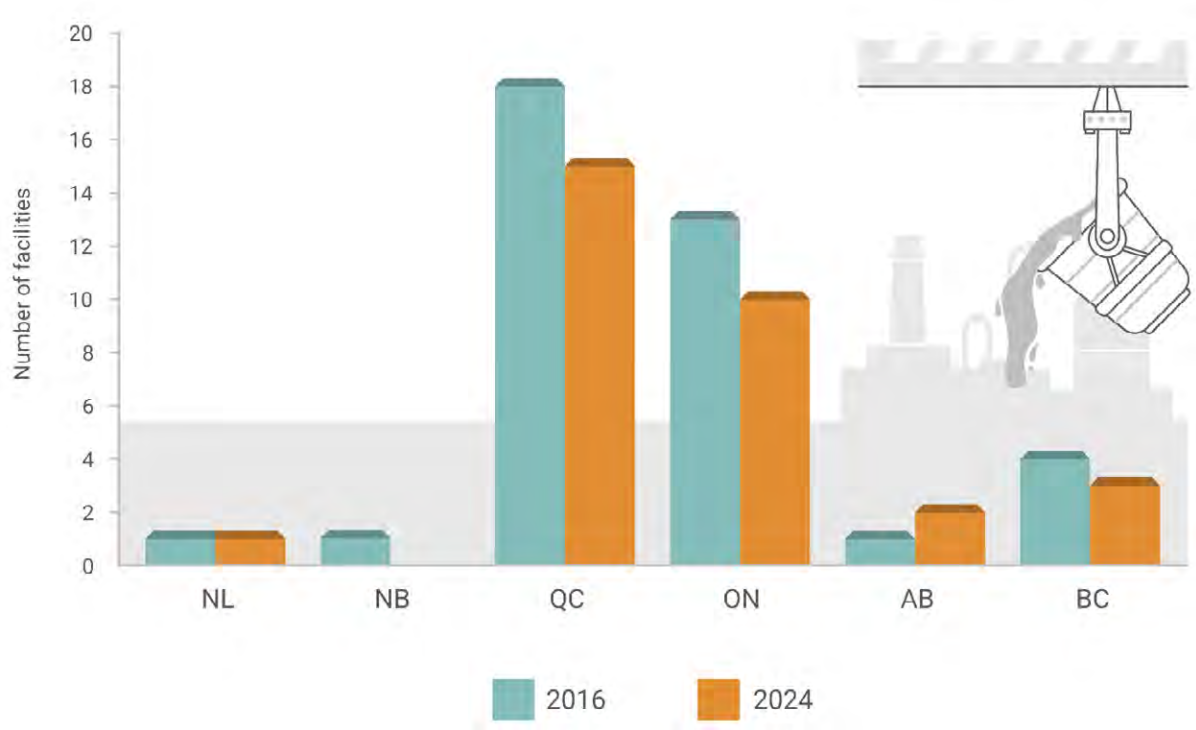


Figure 12: Number of Non-Ferrous Smelting/Refining Facilities by Province

As another method of addressing declining local ore reserves, Canada’s refineries and smelters are using more secondary raw materials and scrap feed.

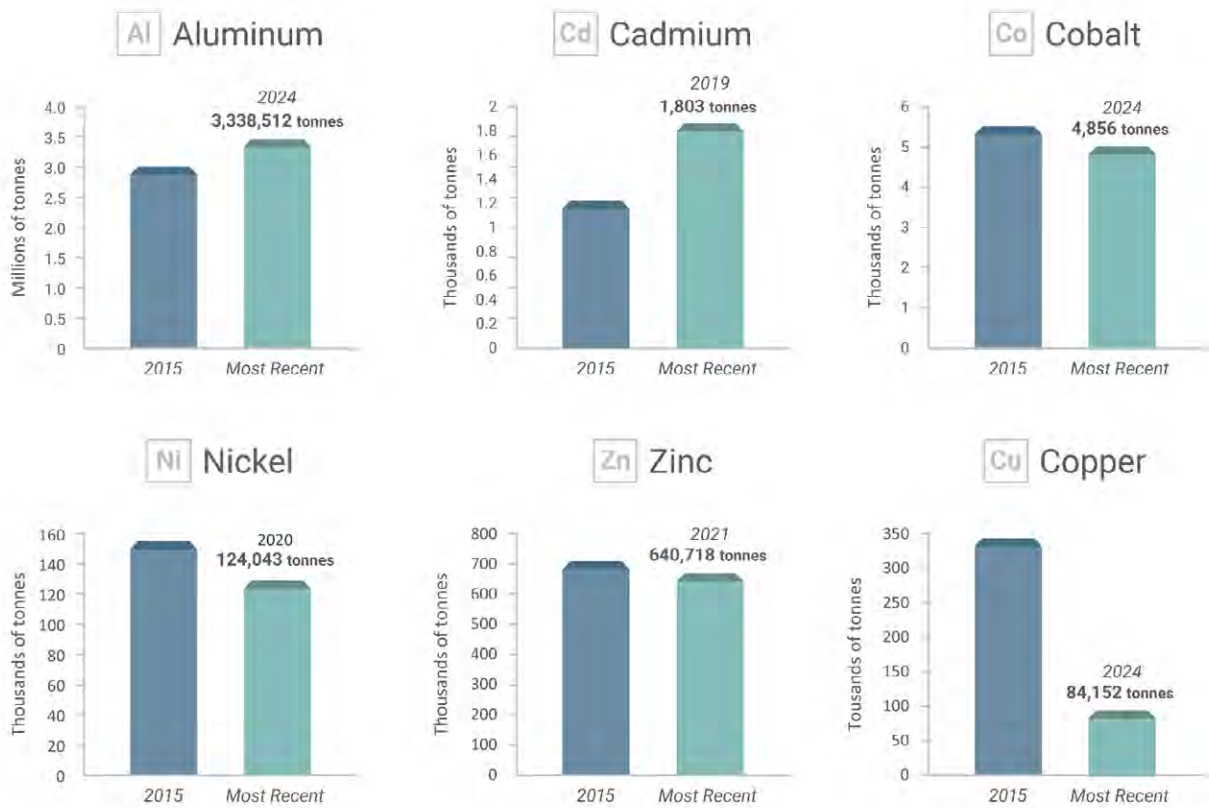


Figure 13: Canadian Refined Metals Production, Selected Metals, 2015 and Most Recent Year Reported²²

The quantity and value of refined metal production in Canada have become irregular due to the depletion of reserves and greater dependence on imported concentrates.

Figure 13 shows the production volumes for refined metals in 2015 and the year for which data is most recently available. Cadmium and aluminum production have increased over the past decade, while refined cobalt, copper, nickel and zinc production have declined.

TRANSPORTATION

The mining industry is one of the largest users of Canada’s transportation sector, is the single largest industrial customer group of Canada’s railways and is a major user of Canada’s ports.

Mines and production facilities are often far from consumer markets. Mine products are bulky, heavy and must travel long distances over inhospitable terrain. Some mines are far outside Canada’s main transportation networks and require transportation of goods by air, water or temporary ice roads.

Mining companies require a reliable transportation network to compete internationally. This is especially true for Canada, the world’s second largest country by land mass. Rail, truck and marine shipping are all important means of transportation for the industry.

22 Sources: Natural Resources Canada; Statistics Canada, Table 16-10-0019-01.

The products of mines are also important to the operators of Canada’s transportation companies. In 2024, metal ores and non-metallic minerals, together with metal and non-metallic mineral products, made up 12% of all of the value of products exported by road, 19% by rail, 22% of all value by ship, and 41% of all air export value.²³

Rail

For more than a decade, crude and processed mineral products have made up more than half of the total non-intermodal freight volume transported by rail in Canada. In 2024, the total non-intermodal freight volume loaded was 297.1 million tonnes, of which 133.5 million tonnes was crude minerals, and 27.8 million tonnes was processed mineral products. This means that crude and processed minerals made up about 54.3% of the freight volume in Canada as shown in Figure 14.²⁴



Figure 14: Crude Minerals and Processed Minerals Transported by Canadian Railways 2014-2024

Costs for shipping by rail have increased substantially since 2019 as shown in Figure 15. The Federal Rail Service Price Index tracks price changes for the mainline freight rail industry. Costs are compared to a reference year (2018), which is assigned a value of 100.

23 Statistics Canada. Table 12-10-0177-01. Canadian international merchandise trade by mode of transport, customs-based, monthly (x 1,000).

24 Statistics Canada. Table 23-10-0216-02. Railway carloadings statistics, by commodity, monthly. Total freight volume reflects revenue freight, which refers to a local or interline shipment from which earnings accrue to a carrier. Total crude minerals include coal, but not oil and gas. Freight volume here excludes intermodal loadings and traffic received from United States connections.

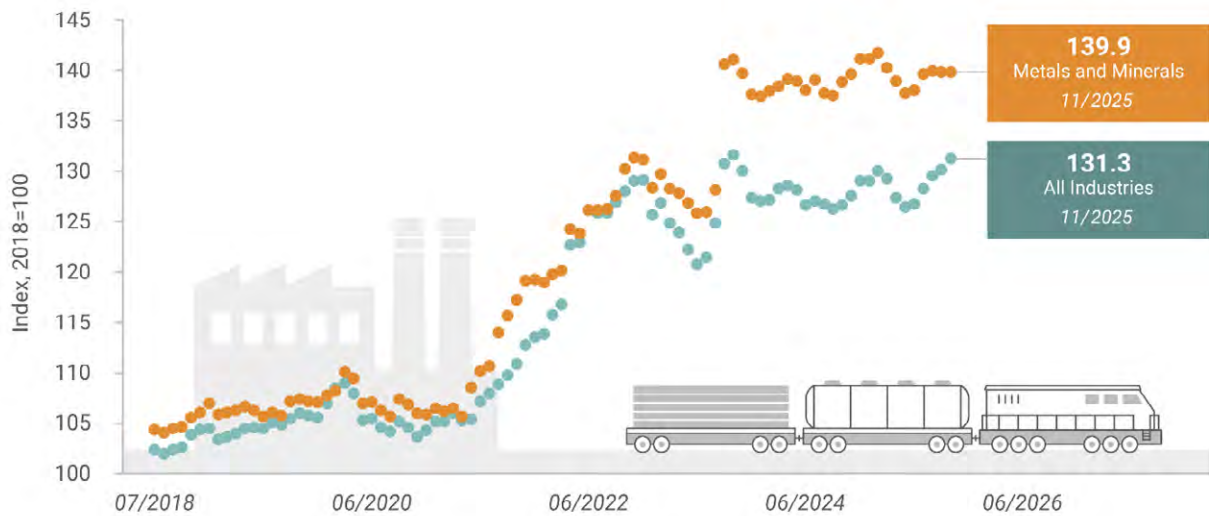


Figure 15: Freight Rail Service Price Index²⁵

For all commodities, rail prices increased by 31.3% between the baseline index average in 2018 and November 2025. Prices remained relatively stable until the middle of 2021, when they began to increase dramatically. Of special concern, the index for metals and minerals has increased more than the average rate for all commodities, up 39.9% since 2018.

In Canada, freight rail is primarily handled by only two Class I railways: CN and CPKC. Of the \$18.8 billion in industry revenues from freight in 2023, CN and CPKC were responsible for 93%.²⁶ Communities and businesses often have no choice about rail service because of their geography, which gives the railways substantial market power over their customers.

Both CN and CPKC charge customers fuel surcharges in addition to regular carload rates. In recent years, these fuel surcharges spiked and have slowly declined as shown in Figure 16. Despite declines, in 2024 they still remain well above rates from the late 2010s.

²⁵ Statistics Canada. Table 18-10-0212-01. Freight Rail Services Price Index, monthly.

²⁶ From Statistics Canada. Table 23-10-0045-01, Railway industry operating and income accounts, by mainline companies (x 1,000) and Table 23-10-0046-01, Railway industry operating and income accounts of regional companies (x 1,000).

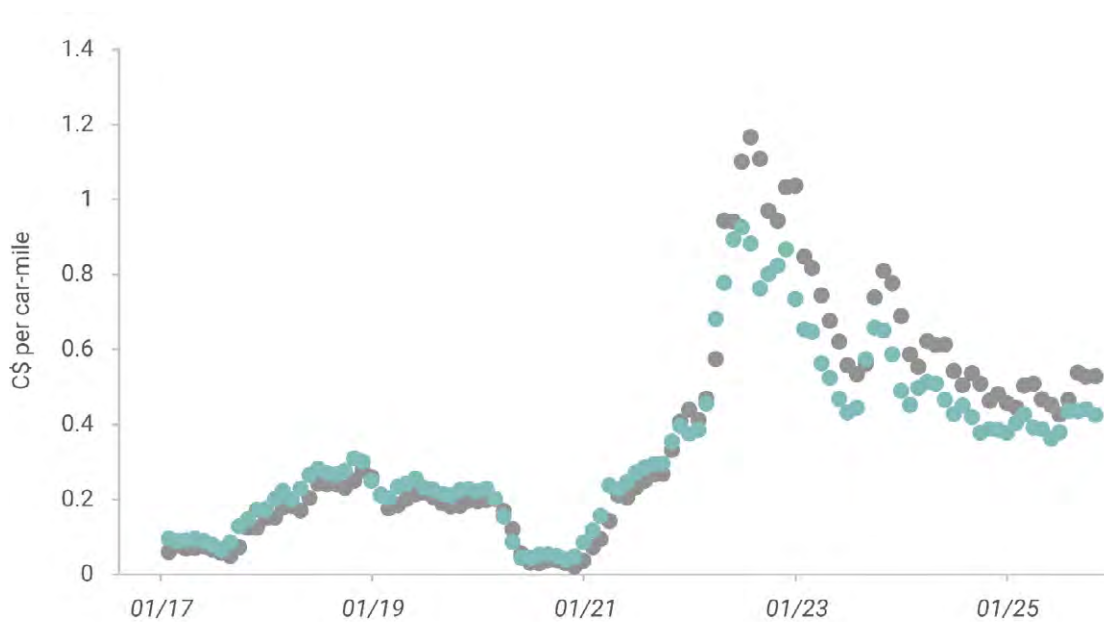


Figure 16: Freight Rail Surcharges²⁷

Fuel surcharges are based on benchmark costs for diesel for both railways. When the price of highway diesel exceeds a set rate per US gallon, the railways charge an additional per-mile per-car rate to shippers.

The increasing fuel surcharges do not consider substantial improvements in efficiency by the railways. The Railway Association of Canada reports that freight fuel efficiency has increased by 12% over the past decade, as shown in Figure 17. Between 2005 and 2023, efficiency increased 27%.²⁸

²⁷ From the United States Department of Agriculture's [Railroad Fuel Surcharges](#) data set. Fuel surcharges are per mile per car in Canadian dollars, converted from USD using the Bank of Canada [monthly average rates](#).

²⁸ From The Railway Association of Canada. [Locomotive Emissions Monitoring Report](#). Table 4, Canadian Rail Operations Fuel Consumption, 2005, 2014-2023 (million litres). 2023.

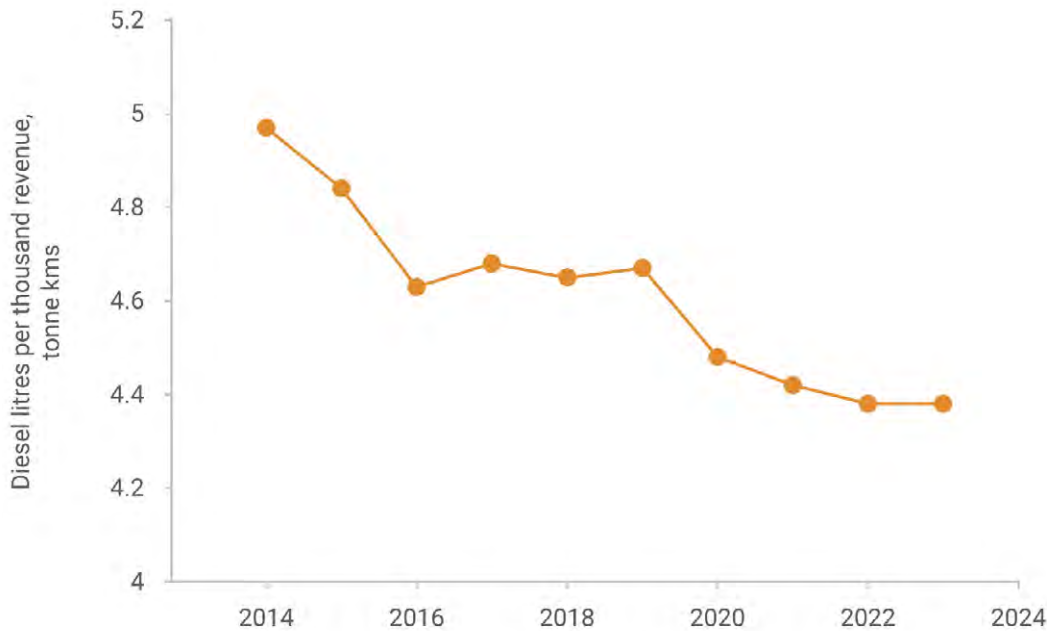


Figure 17: Freight Rail Efficiency, 2014-2023

Railways are also spending proportionally less on fuel. In 2014, CP spent \$1.05 billion on fuel and had total operating expenses of \$4.3 billion.²⁹ Ten years later in 2024, CPKC spent \$1.8 billion on fuel and had total operating expenses of \$9.4 billion. As a percentage of operating expenses, fuel declined from 24% in 2014 to 19% in 2024.³⁰

CN saw a similar decline in fuel costs as a proportion of operating expenses over the last decade, from 24% to 19%.³¹

Road

Trucking also plays an important role in moving mining products. Trucks move mining products from mines to production facilities and customers, and deliver mining supply inputs to mine sites, such as fuel for operations. Mining sites that do not have access to rail rely on truck and marine shipping for these essential materials.

As with rail transport, trucking prices have risen dramatically in recent years. The for-hire motor carrier freight services price index is based on a comparison of current trucking prices to a baseline year (currently 2021) and is maintained by Statistics Canada.

The trucking price index peaked at 128.2 in late 2022, indicating prices were 28% higher than the index year, 2021. While the price index has dropped from its high point in 2022, costs for truck transport are still up substantially from the pre-pandemic era as shown in Figure 18. In September 2025, prices were 21% higher than 2021, and up 44% over the decade since 2015.

²⁹ Canadian Pacific. [It's Simple: Canadian Pacific Annual Report 2014](#).

³⁰ CPKC. [Connecting a Continent: 2024 Annual Report](#).

³¹ From CN's annual reports for [2014](#) and [2024](#).

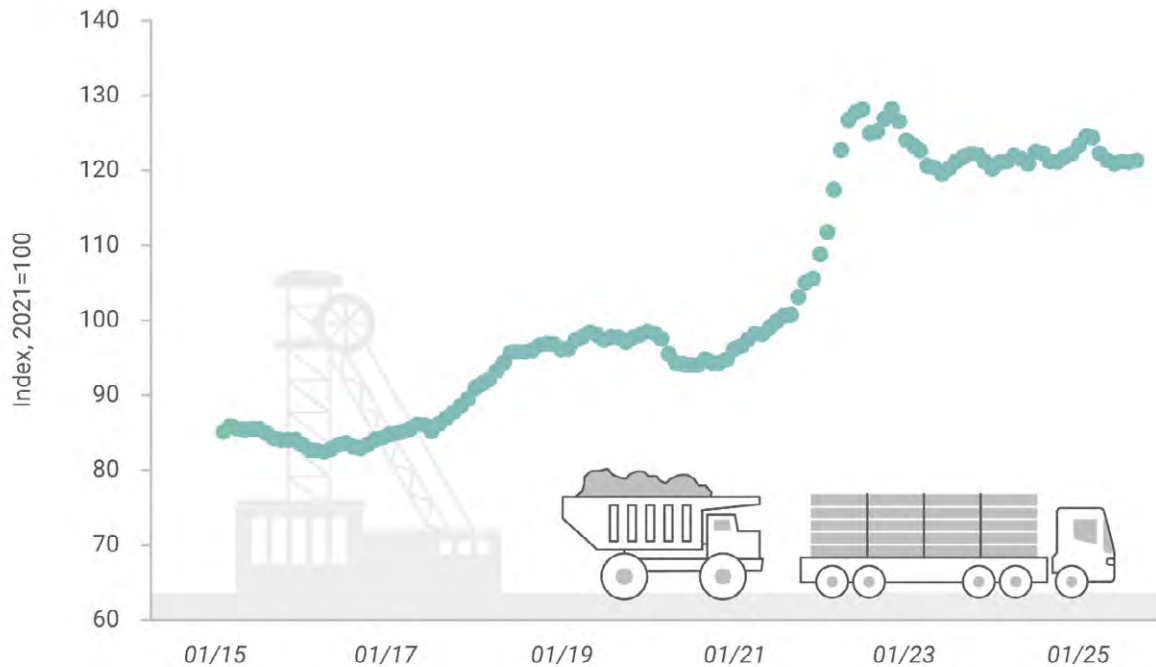


Figure 18: For-Hire Motor Carrier Freight Services Price Index³²

These increased costs put pressure on all producers of goods. The mining industry is particularly vulnerable to these increases in costs because of the high volume and long distances required to ship its products, and because of the need for transportation of essential supplies to mines.

Marine

Mining is among the largest customers of Canadian ports and shipping companies.

Mine products make up more than 40% of the trade on the St. Lawrence Seaway. The products shipped include iron ore, coal, coke, salt and stone. Iron ore alone made up 14% of all freight on the Seaway in 2024.³³

The Port of Montreal handles large volumes of mineral products. Mined products accounted for approximately 3.6 million dry bulk tonnes in 2024, or 40% of the port's dry bulk cargo shipments for the year. Inbound bulk shipments arrive by ship are transported by rail or truck to the region's smelting and refining facilities, and outbound products include iron ore and metal wastes being shipped for processing. On the container side, the port moves metallurgical products, steel, and mineral products, which together accounted for 1.92 million tonnes of goods moved in 2024, or 16% of total container volume.³⁴

Steelmaking coal accounts for 21% of the bulk sector volume handled at the Port of Vancouver annually, which moves shipments to China, Japan and other Asian markets. Fertilizer potash represents another

³² Statistics Canada. Table 18-10-0281-01. For-hire motor carrier freight services price index, monthly.

³³ St. Lawrence Seaway Management Corporation. Seaway Monthly Traffic Results. [Navigation 2024 – Final](#).

³⁴ Port of Montreal [historical data tables](#): containerized cargo and dry bulk cargo for 2023. Bulk cargo mined products include iron ore, salt, fertilizers, gravel, gypsum, other minerals, metal waste, ferro-alloys, and coal.

7% of the port's bulk volume, and minerals another 7%. All told, mining products account for 59 million tonnes, or half of the port's bulk volume.³⁵

Cargo ships are expensive and take a long time to build. Shipowners do not typically maintain substantial excess capacity and plan for demand years in advance. This means that small increases in demand at the margins can cause substantial price increases. Large swings in demand in recent years have raised prices across the board for shipping.

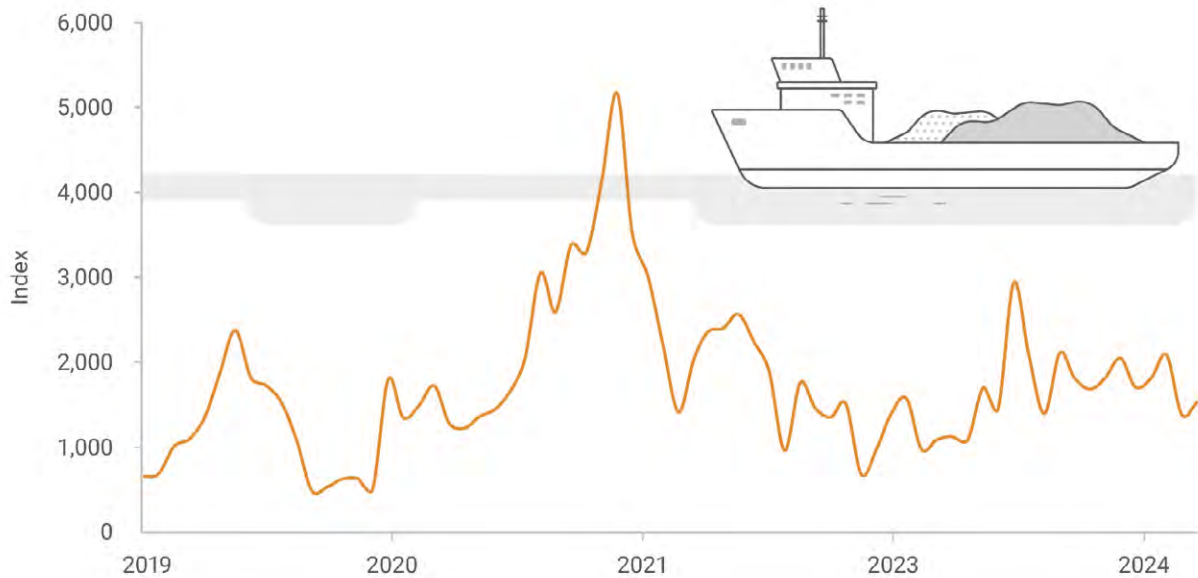


Figure 19: Baltic Dry Index³⁶

The Baltic Exchange's dry bulk sea freight index measures the cost of shipping goods around the world. Prices have declined since their high point in 2021 but appear to have stabilized at a higher level than the pre-pandemic era as shown in Figure 19. The yearly average was 1755 in 2024, compared to annual averages around 1350 in 2018 and 2019.

LOOKING FORWARD

Mineral Production

Canada's mineral production industry faces challenges: production and processing of certain key minerals like copper and nickel are down substantially. A decrease in mineral exploration and investment is responsible for part of this decline in production.

In order to increase mineral production, Canadian governments should undertake comprehensive mineral resource assessments, based on geoscientific studies, to understand and incorporate the value of mineral potential into regional assessments and land management decisions. This is particularly true of northern Canada, where the potential for new discoveries is high.

³⁵ Using Principal Commodities, All Cargo table from the Port of Vancouver's [2024 Statistics Overview](#).

³⁶ Using data for [BDI Baltic Exchange Dry Index](#) BDIY:IND from [investing.com](#).

Canada will also need to support mineral production by building infrastructure – transportation, energy and communication. Substantial investment in building the economic backbones of road, rail, power lines and communication lines will ensure that Canadians can benefit from the rich natural resources of our country.

Finally, strong fiscal policy is a requirement for competitiveness in the global mineral industry. Incentives, competitive taxation levels, and efficient and reliable securities regulations are critical for positively influencing investment in Canada’s mineral sector.

Mineral Processing

The competitiveness of Canada’s mineral-processing industry depends on its ability to secure reliable sources of feedstock from domestic mines. Transportation costs have increased in recent years, making it expensive to import feedstock from abroad. If the processing industry is to remain competitive, enhancing domestic levels of mineral production through investment in exploration and mine development is essential.

Canada’s processing facilities operate in a global market, where China and other countries are expanding their capacity with new facilities and competing fiercely for raw materials. The cost of electricity is also a factor in some Canadian jurisdictions. Given the energy-intensive nature of mineral processing, high-power-cost jurisdictions dampen the competitiveness of existing operations and deter future investment.

Finally, the age of some Canadian operations, and their ability to meet potential regulatory requirements, also affects their viability.

In the face of these factors, the downstream Canadian mining industry risks being left behind.

The projected need for large volumes of minerals and metals, including critical minerals, means that demand both domestically and globally will be high. With among the lowest carbon intensity nickel production in the world, Canada must signal that it no longer takes its smelting and refining industry for granted, nor the extractive supply chain that supports these critical mineral assets. Action to protect its competitiveness is essential to the low-carbon economy both in Canada and abroad.

Supply Chain

Mining companies require a reliable transportation network to compete internationally. This is especially true for Canada, the world’s second largest country by land mass.

The Mining Association of Canada recognizes and appreciates the federal government’s efforts to prioritize critical minerals supply chains as a pillar of economic growth and national security. Budget 2025 significantly strengthened the mining supply chain through new and expanded funds that target transportation, energy, and trade infrastructure in Canada’s North and across critical mineral corridors.

The newly established First and Last Mile Fund will support upstream and midstream projects that address infrastructure and connectivity gaps to bring near-term critical mineral projects into production. A flagship project under the fund will be the proposed 765-kilometre Yukon–B.C. Grid Connect, a high-voltage transmission line linking the Yukon grid to British Columbia. Backed by a memorandum of understanding between the two governments, the project will deliver stable, renewable power to unlock mineral potential in the Yukon’s Cassiar and Tanana regions and British Columbia’s Golden Triangle.

The \$1 billion Arctic Infrastructure Fund supports major transportation projects across the North, including airports, seaports, highways, and all-season roads. These projects will serve both economic and national security objectives by enhancing dual-use civilian and defence infrastructure.

Other efforts, including by Crown-Indigenous Relations and Northern Affairs Canada and the Canadian Infrastructure Bank, will support the construction of the infrastructure required for Canada's next century.

Together, these initiatives mark a significant step toward closing Canada's northern infrastructure gap and unlocking the full potential of the mining sector. Canada's efforts in this area must continue: communications and transportation infrastructure are essential to enhancing the mining supply chain and come at a much higher cost than those sites located in less-remote jurisdictions.

Rail

Canadian National Railway Company (CN) and Canadian Pacific and Kansas City Southern (CPKC) are Canada's only Class 1 railways. CN and CPKC form a dual monopoly that causes a lack of balance in the shipper/rail relationship. Many communities and businesses are captive to a single Class 1 railway, which can use its market power to increase rates for freight and provide substandard services. This is particularly true for locations in remote and northern regions of Canada, including many members of the Mining Association of Canada.

Fuel surcharges by the railways have outpaced their costs, and they have not used their profits to increase service or create a more robust network. Instead, Canada has seen transportation infrastructure failures due to extreme weather events, rail blockades, and protracted labour disputes.

In 2024, Canada experienced its first-ever simultaneous halt of rail service from both Class 1 railways. The complexity of railway operations mean that CN and CPKC began to shut down their operations two weeks before the potential strike date in August 2024. This shutdown had knock-on effects to other parts of the transportation network, with some companies refusing to accept shipments to Canada that would require transportation by rail even before the strike began.

Canadian miners need a reliable, efficient partner in the rail industry that works hard to reduce its costs, and passes part of the savings on to its customers rather than considering the money as windfall profits.

Marine Shipping

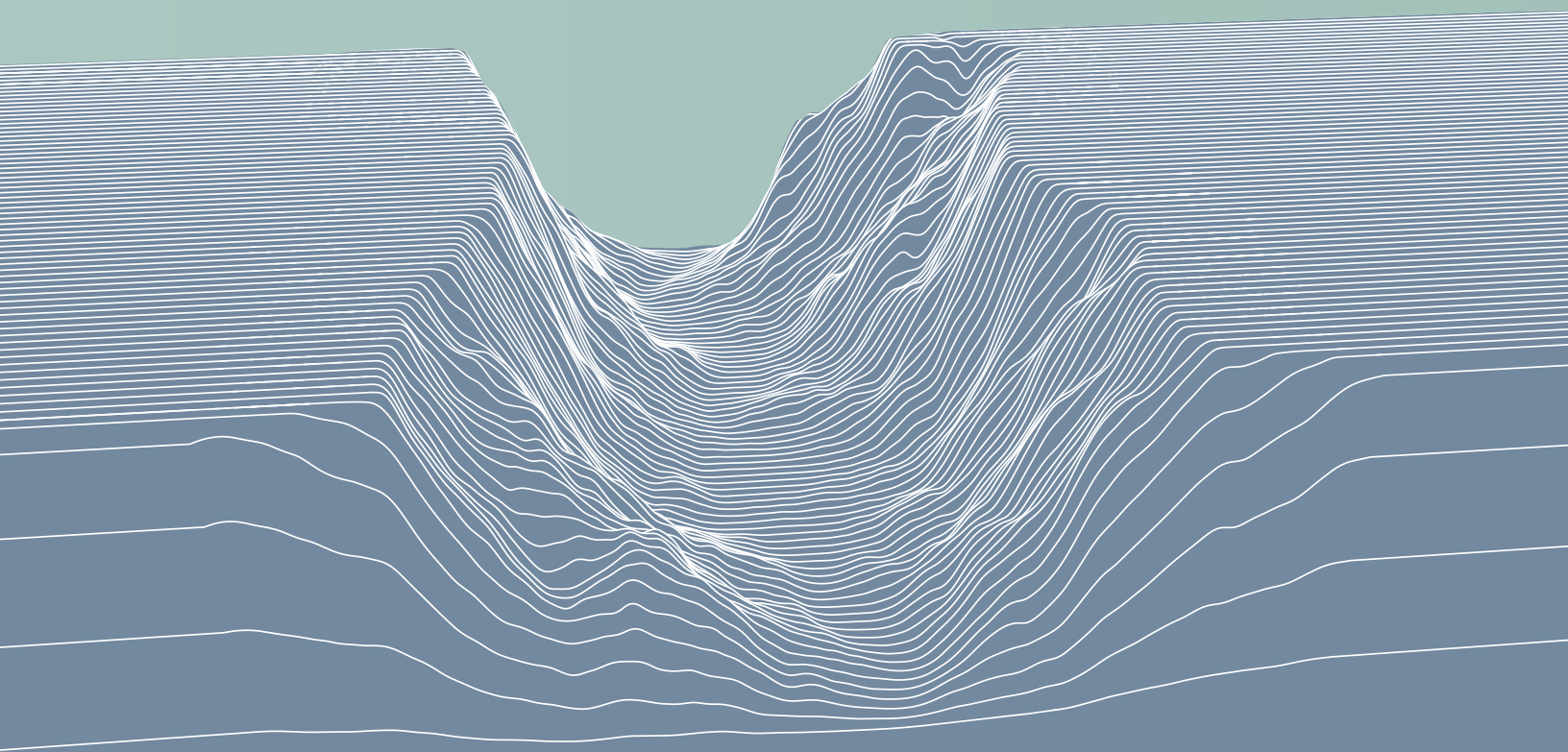
The International Maritime Organization (IMO) is the United Nations' Special Agency responsible for the safety of life at sea and the protection of the marine environment. As a signatory to the IMO's conventions, Canada's domestic maritime shipping policies tend to move in tandem with those of the IMO. The Canadian mining industry is committed to upholding the highest environmental protection standards pertaining to shipping in the marine environment.

MAC appreciates the constructive and solutions-oriented engagement our industry has had with Transport Canada, who lead and coordinate Canada's delegation to the IMO, on a range of marine issues.

As a regular observer on Canadian delegations to IMO, MAC appreciates Canada's reputation for excellence and collaboration at the IMO, and attributes this to the hard work and expertise of our diplomats and technical experts in these areas.

SECTION 3

The Money:
Reserves, Prices,
Financing, Exploration,
Investment and Fiscal
Policy



Identifying mineral resources is the first step in a capital-intensive process. Mining companies require money to operate as they identify, qualify, and quantify reserves. They require capital to build mines, to construct roads and bridges, to generate power, and to upgrade existing facilities. Only at the end of the process, once actual production has begun, does a mine generate income.

Investment in infrastructure, construction and repairs depends on complicated interactions between global prices for minerals, the regulatory environment, and the cost and availability of capital.

As a result, mining requires sophisticated capital markets. Markets connect investors with companies that require capital for exploration, capital investment, and research and development. Access to capital is what transforms mineral resources from a potential asset into a real one.

CANADIAN RESERVES

Mineral resources of metals, non-metals and precious stones are present across the country. The process of determining whether it is economic to extract these resources begins with exploration.

There are specific names attached to mineral resources, depending on the level of confidence with which they are known. Mineral resources may be *inferred*, *indicated* or *measured* in increasing levels of confidence and measurement. *Indicated* and *measured* resources can be converted into *probable* or *proven* reserves depending on the confidence that a qualified person has in the estimates, and on the factors that affect the costs of extraction. A diagram of the relationship between resources and reserves is presented in Figure 20.

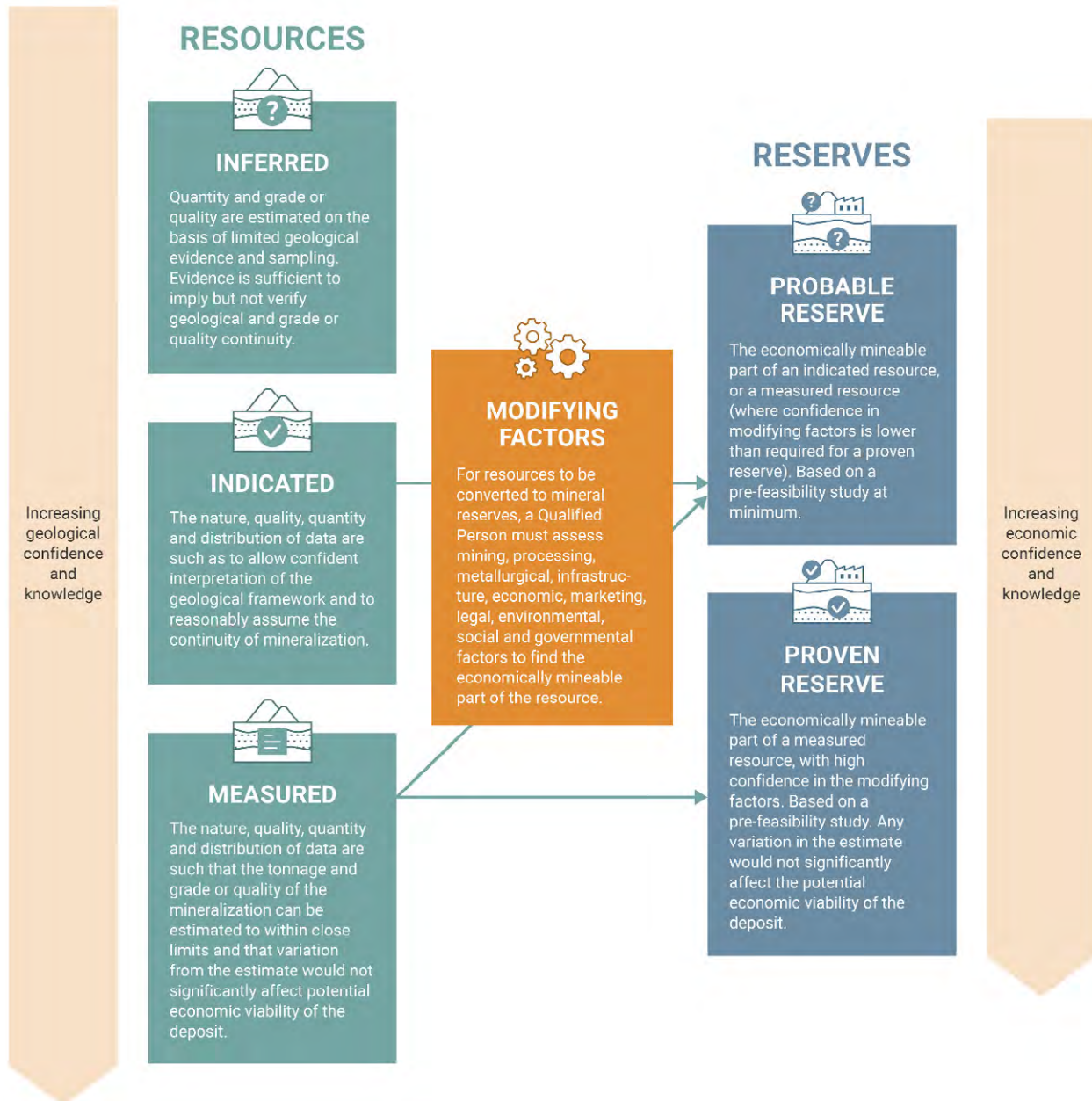


Figure 20: Resources and Reserves³⁷

Mineral reserves decrease through mining activities but can increase through exploration and the development of new technologies.

³⁷ Based on definitions and Figure 1 from the CIM Definition Standards for Mineral Resources & Mineral Reserves by the Canadian Institute of Mining, Metallurgy and Petroleum Standing Committee on Reserve Definitions.

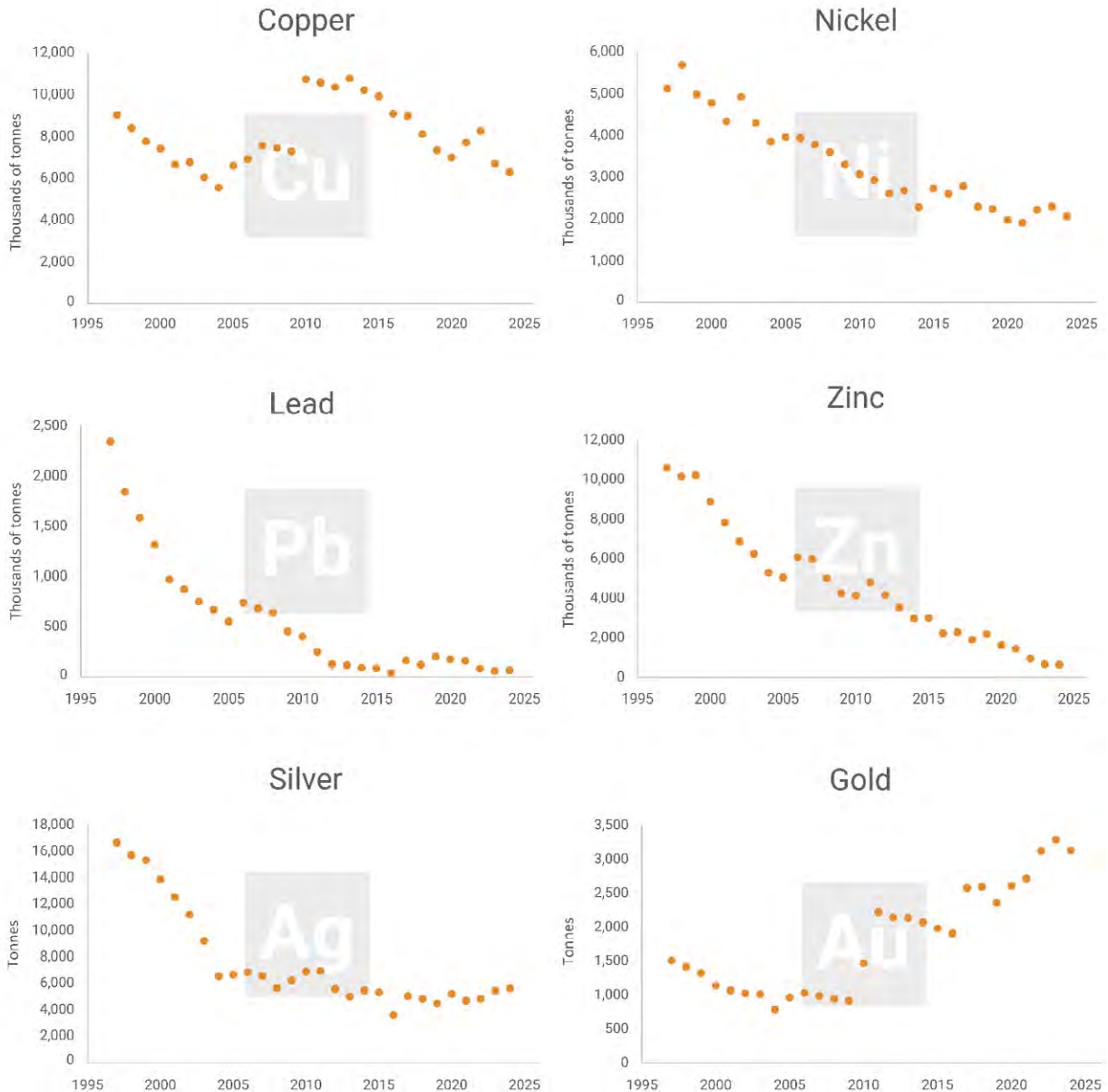


Figure 21: Reserves of Selected Metals, 1997-2024³⁸

Figure 21 shows the change in proven and probable reserves for select metals from 1997 to 2024. Over this period, there have been marked declines in Canadian mineral reserves in all major base and precious metals except gold (see also Annex 5). The most dramatic declines have been in lead and zinc, down by 97% and 94% respectively from their high values at the beginning of the series in 1997.

Consistent investment over time and access to large tracts of land to explore are needed to reverse the long-term decline in proven and probable reserves. Identifying new reserves to be mined and then used in manufacturing requires investment in both exploration and mining development.

New technologies may also be helpful in increasing reserves. Libraries of core samples containing many years of data can be re-evaluated using new algorithms aided by artificial intelligence to identify potential

³⁸ From Natural Resources Canada, based on company reports and the Federal-Provincial/Territorial Annual Survey of Mines and Concentrators.

resources that were originally missed. Increasingly sophisticated methods for modelling the size of resources can also increase reserves. Because the economic viability of extraction is an important part of the calculation of reserves, extraction costs are important inputs. More efficient methods of extraction can increase reserve size when costs are reduced, and it becomes economical to extract larger amounts of lower grade ore.

EXPLORATION

Exploration is the first step in mineral resource extraction. Identifying and quantifying reserves mean that mines can be developed, smelters and refineries can be built and operated, and manufacturing is provided with the inputs it needs.

The goal of exploration is to locate mineral resources that may become reserves. Technological advances in surveying, airborne technologies and down-hole seismic imaging have enabled companies to find deposits with less environmental impact and more success than ever before. Increasing reserves over the long term, however, requires ongoing investments in exploration and deposit appraisal.

Exploration and Deposit Appraisal in Canada

Spending on exploration is a leading indicator for the future success of mineral production in Canada. Natural Resources Canada defines spending on finding and assessing mineral resources as follows:

- **Exploration expenditures:** Spending on activities up to and including the first delineation of a previously unknown mineral deposit.
- **Deposit appraisal expenditures:** Spending on activities that bring a delineated deposit to the stage of detailed knowledge required for a production feasibility study.

The two expenditures combined are “exploration spending.” Spending was steady at \$4.2 billion in 2024, with intentions for 2025 slightly higher as shown in Figure 22.

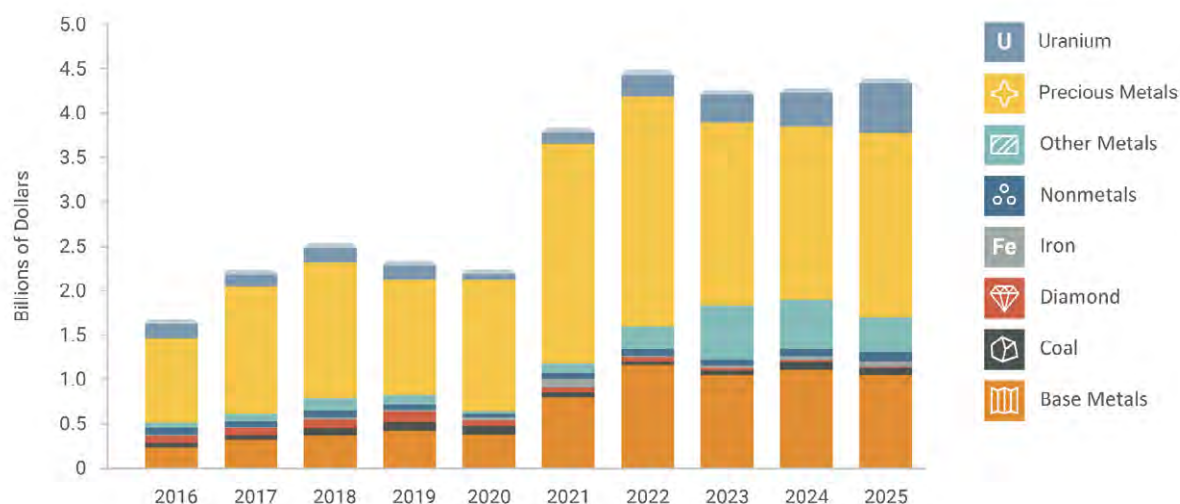


Figure 22: Mineral Exploration and Deposit Appraisal Expenditures, 2011-2024³⁹

³⁹ From Natural Resources Canada, based on the Federal-Provincial-Territorial Survey of Mineral Exploration, Deposit Appraisal and Mine Complex Development Expenditures. [Exploration and Deposit Appraisal, Totals by Commodity](#). Data for 2024 are preliminary. The number for 2025 is intended spending.

The major target commodities for exploration and deposit appraisal in 2024 were precious metals (46% of spending) and base metals (26% of spending). Other metals (13%) and uranium (9%) were also notable targets. Over the past decade, base metals have increased as a proportion of total spending, while precious metals have declined as shown in Figure 22.

A boom in exploration spending in the early 2010s was driven by the cyclical peak in metals prices, caused by rapid economic expansion in China and elsewhere in the developing world. Decreases in prices for metals and minerals meant less spending on exploration through the rest of the decade, with a strong recovery after 2020.

Exploration and deposit appraisal work is spread across the country, with spending recorded in every province and territory except Prince Edward Island. Spending in 2024 was highest in Ontario (\$1.09B), Quebec (\$890M) and British Columbia (\$747 M) as shown in Figure 23.

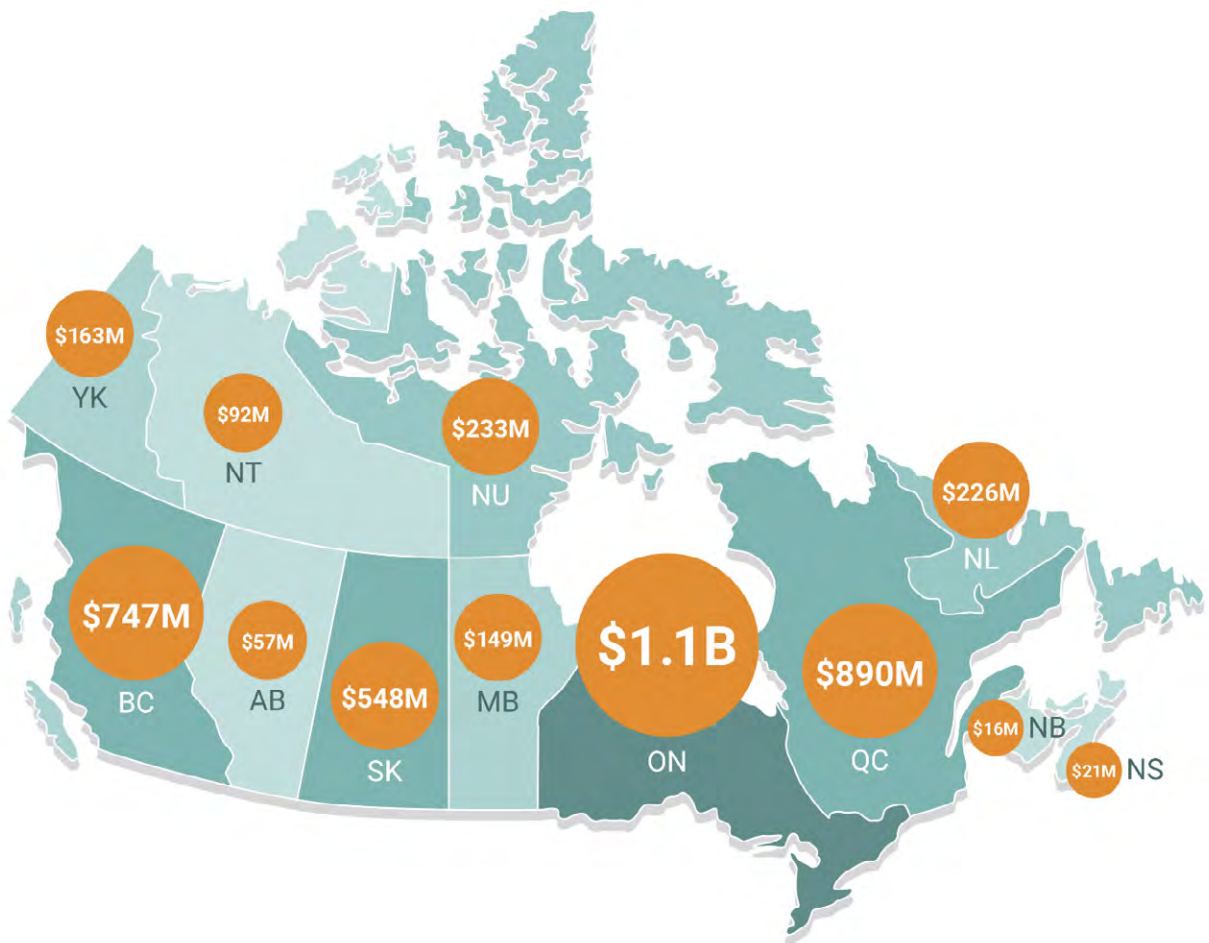


Figure 23: Mineral Exploration and Deposit Appraisal Spending by Province and Territory, 2024⁴⁰

40 From Natural Resources Canada, *Total Mineral Resource Development, Province and Territory, 2024*. Data for 2024 are preliminary.

Canada as a Global Destination for Exploration Spending

Globally, Canada has been a top destination for mineral exploration investment for the past forty years. In 2024, 19% of global exploration spending was in Canada, the top national destination.

Global spending on exploration declined slightly in 2024 to \$12.5 billion US, with a further drop expected to \$12.4 billion US in 2025. Global exploration spending remains substantially below the peak of US \$20.5 billion in 2012.⁴¹

Because of weakness in the junior sector, Canada, Australia and the United States saw declining exploration budgets. Saudi Arabia, Chile and Peru posted gains, based on the strength of their gold and copper allocations.

MINERAL AND METAL PRICES

Mineral and metal prices have a direct effect on the attractiveness of investment. When prices are high, investors are more likely to provide the capital required for projects. Given that most projects involving metals and minerals have a multi-year timeline, stable, increasing prices are the most desirable trend.

Metal	Unit	High Value (month)	Low Value (month)	% Difference (January-December)
Al Aluminum	US \$/lb	\$1.18 (October)	\$0.99 (February)	+15.88%
Au Gold	US \$/tr. oz	\$2,690.08 (October)	\$2,023.24 (May)	+30.18%
Ag Silver	US \$/tr. oz	\$32.42 (October)	\$22.66 (February)	+34.25%
Cu Copper	US \$/lb	\$4.60 (May)	\$3.77 (February)	+6.92%
Ni Nickel	US \$/lb	\$8.88 (May)	\$7.01 (December)	-4.09%
Zn Zinc	US \$/lb	\$1.41 (October)	\$1.07 (February)	+20.62%
Fe Iron Ore	US \$/DMT	\$135.82 (January)	\$92.83 (September)	-24.75%
U Uranium	US \$/lb	\$100.25 (January)	\$72.63 (December)	-27.55%

Figure 24: 2024 Minimum and Maximum Monthly Prices for Selected Metals⁴²

41 Eillen Grace Dela Cruz for S&P Global Market Intelligence.β. Discussion of exploration by country in the next paragraph from the same source.

42 Price data from Cameco (uranium) and Market Insider (all other metals).

Gold and silver saw the largest price increases in 2024 as shown in Figure 24. Prices for both metals continued to rise during 2025, with gold and silver reaching all-time high levels in late 2025.

Annual demand for gold in 2024 was 4,974 tonnes. Central banks continued to be a major buyer, exceeding 1,000 tonnes in 2024. Investment (1,180 tonnes), jewellery (1,877 tonnes) and technology (326 tonnes) were other major consumers of gold, pushing prices higher.⁴³

Silver prices were driven by strong industrial demand, which reached a record high in 2024 and has since continued to rise. Investments in the electrical grid, photovoltaic cells, and end-user applications related to artificial intelligence were key factors in industrial demand. Overall, silver demand exceeded supply for the fourth consecutive year.⁴⁴

On the other hand, uranium and iron ore both saw major price declines in 2024.

Uranium prices doubled in the 13 months from December 2022 to January 2024, from a spot price of \$47.68 US to \$100.25 US. Prices declined substantially in 2024, but even the low value month (\$72.63 US in December) was still well above the average spot prices in 2021 (\$35 US) and 2022 (\$50 US).⁴⁵ Uranium contracts are negotiated privately between buyers and sellers and can change substantially year to year. The long-term trend of increasing uranium prices (even given the downturn in 2024) is thought to be the result of planned increases in nuclear capacity over the long term.⁴⁶

Iron ore prices likely declined because of a combination of increasing global production and reduced demand. The Organisation for Economic Cooperation and Development (OECD) reports that the global steel market, which uses almost all of the iron ore mined, is in a precarious state. “Excess capacity is growing from unsustainably high levels, fuelled by market-distorting subsidies and other non-market practices... Substantial increases in capacity are planned worldwide over the next three years, with 165 million metric tonnes (mmt) of new capacity additions projected during 2025-27, despite only modest global steel demand growth.”⁴⁷

Over the longer term, metals prices have generally decreased slightly from their highs in 2022. Recent years have shown a robust increase in these metals relative to the mid 2010s baseline, with varying corrections in 2023 and 2024.

The Bank of Canada maintains a minerals and metals price index based on prices for individual commodities, weighted by their production value. The minerals and metals price index is made up of US dollar prices for two precious metals, six base metals, and one non-metal.⁴⁸ The past decade of monthly price index values is shown on Figure 25.

43 World Gold Council. [Gold Demand Trends, Q4 and Full Year 2024](#).

44 The Silver Institute. [Silver Industrial Demand Reached a Record 680.5 Moz in 2024](#).

45 Cameco. [Uranium Price](#). Average prices noted here are an average of monthly averages for 2021 and 2022.

46 See, for example, the World Nuclear Association’s [Nuclear Fuel Report](#) with requirements more than doubling for the reference scenario by 2040, and even the lower scenario requiring an increase of more than 50%.

47 Organisation for Economic Co-operation and Development. [OECD Steel Outlook 2025](#).

48 Bank of Canada. [Commodity Price Index](#). The components are gold, silver, nickel, copper, aluminum, zinc, potash, lead and iron.

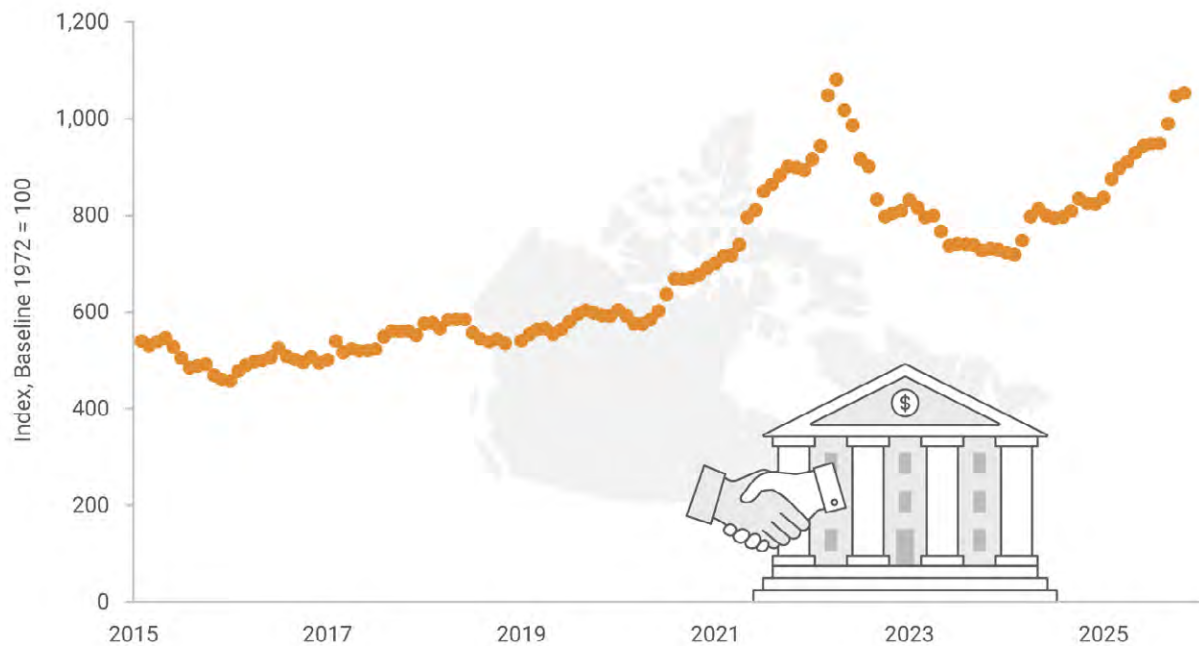


Figure 25: Minerals and Metals Price Index

The index reached an all-time monthly high of 1080.76 in April 2022, but declined later in 2022 and 2023. After a steady period in 2023 and 2024, the index has returned close to its maximum late in 2025.

Demand for mineral and metal products is likely to increase over the medium to long-term at an accelerating rate. The transition to a lower carbon future will result in increasing demand for battery minerals and metals, including copper, nickel, lithium and cobalt. Increasing geopolitical tensions and their implications for supply-chains mean that there is increasing desire to keep inputs to critical manufacturing capabilities close to home.

FINANCING

Canada is the leading global centre for mining finance. The Toronto Stock Exchange (TSX) and TSX Venture Exchange (TSX-V) list about 40% of the world's publicly traded mining companies. Combined, the two exchanges accounted for \$43 billion in equity raised over the past five years, or 32% of the worldwide total.⁴⁹

At the end of 2024, 1,097 of the firms listed on the TSX and TSX-V were mining companies. Together, they had a combined market value of \$603 billion and raised \$10.4 billion in equity. The number of listings of mining companies on both exchanges has been relatively steady in the past five years but is down more than 15% over the past decade, as shown in Figure 26.

49 TMX. 2025 Guide to Listing: Toronto Stock Exchange / TSX Venture Exchange.

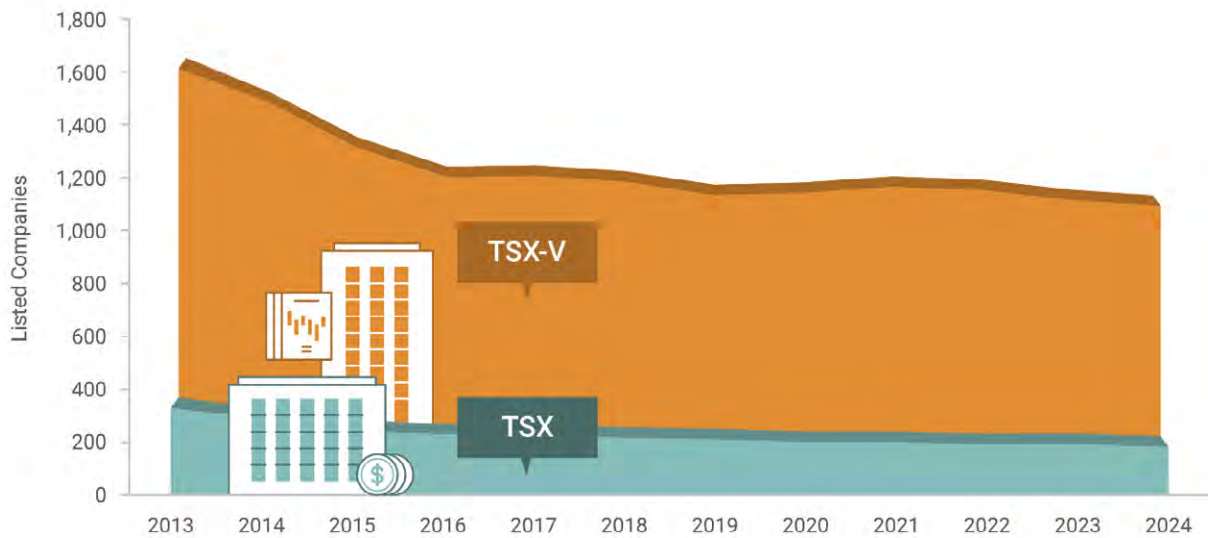


Figure 26: TSX and TSX-V Mining Listings by Year⁵⁰

The two markets have a global audience: more than 250 analysts cover mining companies listed on the exchanges, and approximately 40% of all trading originates outside of Canada.⁵¹

Because of their global audience, access to investors, and liquidity, Canadian exchanges have traditionally been the most desirable location for initial public offerings for mining companies.

There were 42 new listings on the TSX-V and 10 on the TSX in 2024, including four IPOs, ten Qualifying Transactions (effectively, reverse takeovers by operating businesses), two reverse takeovers, and six graduations from the TSX-V to the TSX.⁵²

The Canadian exchanges give mining companies access to capital while offering investors a regulated market for venture investments. The ecosystem of businesses that support mining finance in Canada form a beneficial cluster that creates benefits for the sector and the whole economy.

Financing for the Junior Mining Sector

The mining sector is divided into two types of company: junior and senior. Junior companies are nimble, flexible, and raise money on the equity markets to support their exploration activities. Senior mining companies are more experienced, larger, and generate cashflow from their operations and production instead of raising it on the market. When a junior company finds a mineral resource that could become a mine, they typically partner with a senior company to bring the mine into production.

Junior mining companies face persistent challenges raising the capital that they need to operate. In Figure 27, the variation in exploration and deposit appraisal expenditures by junior companies is visible: junior miners were able to spend just \$632 million in 2016, but almost \$2.5 billion in 2022 and \$2 billion in 2023 and 2024. Because juniors don't generate cashflow from their activities, they require access to

⁵⁰ From [Market Intelligence Group reports](#) by TSX and TSX-Venture Exchanges. Using December monthly reporting for years 2013-2024.

⁵¹ Also from the [TMX 2025 Guide to Listing](#).

⁵² TSX. [Market Intelligence Group Report: December 2024](#).

capital for all aspects of their operation: for salaries, for drilling equipment, for modelling geology and for conducting feasibility studies. Without sufficient access to capital, the years of work required to move a project forward may be substantially extended.

When exploration spending is high, expenditures by junior companies tend to be slightly larger than senior companies. When spending is low, senior company spending predominates. At their recent low point in 2015 and 2016, junior companies were responsible for less than 40% of the exploration and deposit appraisal spending. In 2024, junior companies spent about half of the \$4.3 billion total. Spending is expected to be relatively stable in 2025, with slightly more money spent by senior miners and slightly less by juniors.

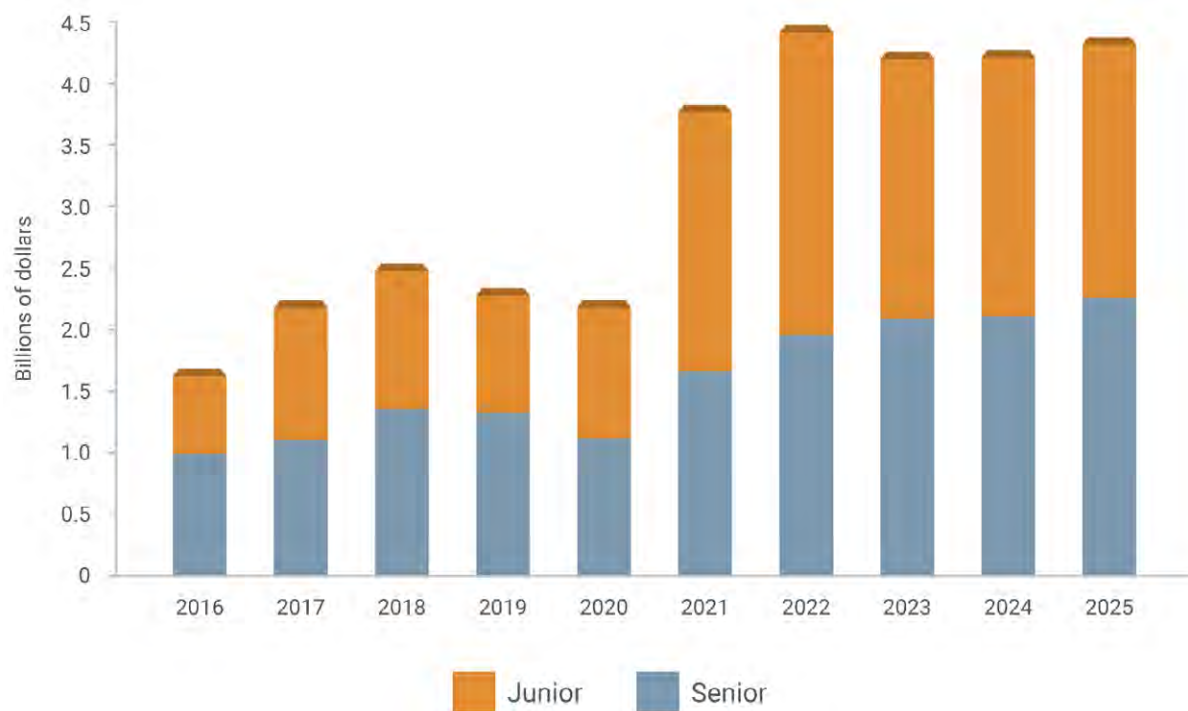


Figure 27: Mineral Exploration and Deposit Appraisal Expenditures, By Company Type, 2016 - 2025⁵³

Mining Industry Capital Investment

In 2024, capital spending by the mining industry made up 6% of Canada's total capital expenditures on non-residential tangible assets.⁵⁴ The value of capital spending in mining and quarrying alone was \$16.5 billion in 2024. This is up from a recent low of \$9.5 billion in 2020, as shown in Figure 28. Planned capital expenditures for 2024 are \$22.7 billion for all stages of the sector.

⁵³ Natural Resources Canada. [Exploration and Deposit Appraisal, Company Type](#). Data for 2025 are revised intended spending collected April-September 2025.

⁵⁴ From Statistics Canada. Table 34-10-0035-01. Capital and repair expenditures, non-residential tangible assets, by industry and geography (x 1,000,000). Using NAICS codes 212, 327, 331, and 332. NAICs code 213 is modified using the assumed ratio of mining activities.

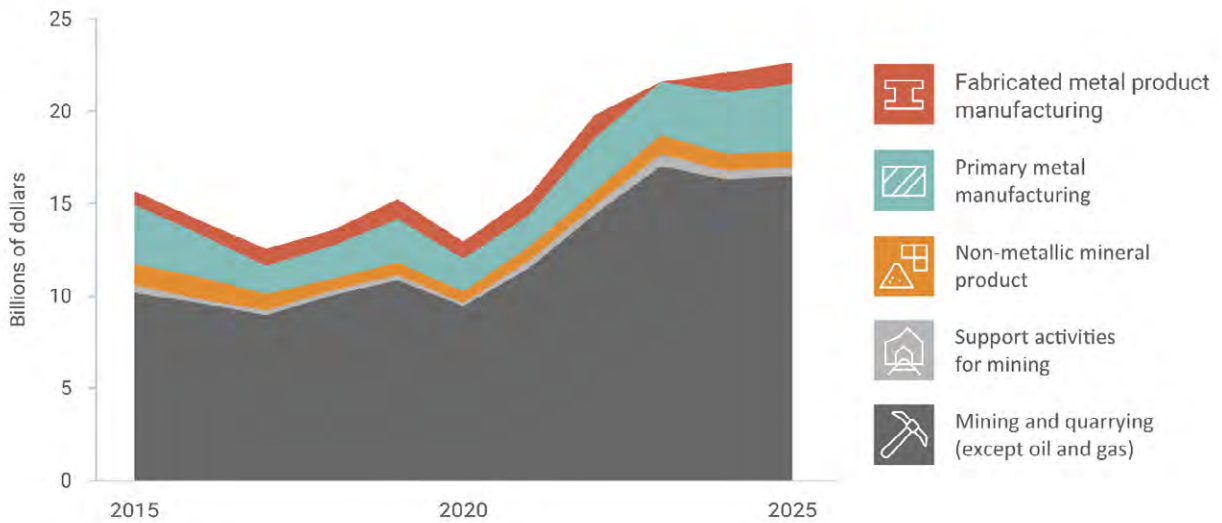


Figure 28: Capital Expenditures by the Mining Industry⁵⁵

Although capital spending covers all stages of the industry, 90% is typically invested in extraction and smelting/refining. Within Stage 1 (mining and quarrying), approximately two thirds of capital spending go towards construction and one-third towards machinery and equipment. In Stage 2, primary metal manufacturing, the ratio is reversed, with about one-fifth of spending directed to construction and the rest to machinery and equipment.

LOOKING FORWARD

Federal, provincial and allied international governments have recognized that Canada has the raw materials and value-added mineral and metal manufacturing expertise to help meet their growing demand while diversifying supply sources. In short, countries diversify their supply chains with improved security and sustainability when they source materials from Canada.

Over the last 15 years, several Canadian senior mining companies have been acquired by multinationals, resulting in fewer head offices in Canada. Canada’s share of global production for critical minerals and metals has been decreasing, with other jurisdictions capturing greater market share of growing global demand. Capital investment continues to be substantially below its level a decade ago.

Canada needs to do more to encourage the development of the new Canadian mines and processing facilities that the world needs. Increasing investment in the mining sector should be a top priority for federal, provincial and territorial governments.

⁵⁵ Statistics Canada. Table 34-10-0035-01. Capital and repair expenditures, non-residential tangible assets, by industry and geography (x 1,000,000). Data for 2025 is spending intentions. NAICS codes the same as previous chart.

Government Commitment to the Mining Sector

The Canadian government's Budget 2025 was a major commitment to the mining sector. It provides the policy and fiscal foundation needed to attract global investment and accelerate domestic production.

The budget established the Critical Minerals Sovereign Fund, with \$2 billion over five years for equity investments, loan guarantees, and offtake agreements in Canadian projects. It also launched the \$371.8 million First and Last Mile Fund to bring near-term projects into production by addressing infrastructure and connectivity gaps.

The budget also expanded the Critical Minerals Exploration Tax Credit (CMETC). The CMETC is a non-refundable credit for specific mineral exploration expenses, which originally covered 15 eligible critical minerals. Budget 2025 expands the list to include 12 additional critical minerals necessary for defence, semiconductors, energy, and clean technologies.

Along with the CMETC, the government expanded the Clean Technology Manufacturing Investment Tax Credit (CTM-ITC). The CTM-ITC is a refundable tax credit for investments in new machinery and equipment used to manufacture or process key clean technologies, and to extract, process, or recycle key critical minerals.

Budget 2025 expanded the CTM-ITC to include polymetallic extraction and processing. In Canada, copper is often found with other valuable metals, but the CTM-ITC originally required that 90% or more of the value of production be of copper (or one of the other priority metals) alone. Reducing the required value of priority metal production to 50% means that copper projects that include other metals like gold, silver, molybdenum and zinc are now eligible.

The CTM-ITC has greater value for greenfield sites where a substantial amount of new equipment will be purchased. These greenfield mines have long lead times because of regulatory approvals and construction costs. Enhancing production from existing operations, facilitating the extension of the life of existing mines, and supporting the construction of new brownfield mines could significantly encourage investment in multi-billion-dollar projects. This could be achieved by expanding eligible expenses to include mine development-related expenditures beyond equipment.

Expanding eligibility for the CTM-ITC will also help critical mineral recycling projects. Capital expenditures to construct new recycling facilities can be prohibitively high, especially for nascent markets like vehicle battery recycling. Eligible machinery and equipment should include, but not be limited to, feed material receipt and storage, product drying and storage, and general infrastructure like pumps, tanks and filtration units.

Additional commitments in Budget 2025 included \$443 million to advance innovative processing technologies, allied co-investments, and stockpiling mechanisms under the Defence Industrial Strategy; renewal of the Mineral Exploration Tax Credit to 2027; and a \$10 billion increase to the Canada Infrastructure Bank to support nation-building projects.

Budget 2025 also directs Export Development Canada to expand financing for critical minerals, clean technology, and processing projects. It also proposes \$5 billion over seven years, starting in 2025-26, for Transport Canada to create the Trade Diversification Corridors Fund to strengthen supply chains and unlock new export opportunities.

In addition to these budget commitments, the government announced on October 31 the launch of the Critical Minerals Production Alliance with G7 and industry partners. The Alliance includes 26 investments and measures worth \$6.4 billion to advance critical mineral projects, including six located in Canada. It is supported by the Roadmap to Promote Standards-Based Markets for Critical Minerals, a G7 initiative to align sustainability and traceability standards across allied countries.

The government also issued an Order in Council under the *Defence Production Act* to authorize stockpiling of critical minerals to strengthen supply chains and national security. Through its G7 Presidency and the direction set in Budget 2025, Canada is positioning the mining industry as a reliable supplier of responsibly produced minerals for clean energy, advanced manufacturing, and defence.

All of these commitments highlight the government's renewed focus on and commitment to the mining sector. The focus must now be on implementation. Success will depend on close coordination between government departments and agencies. They must operationalize the new funding tools, enact legislative changes, and ensure alignment with Canada's industrial and defence strategies.

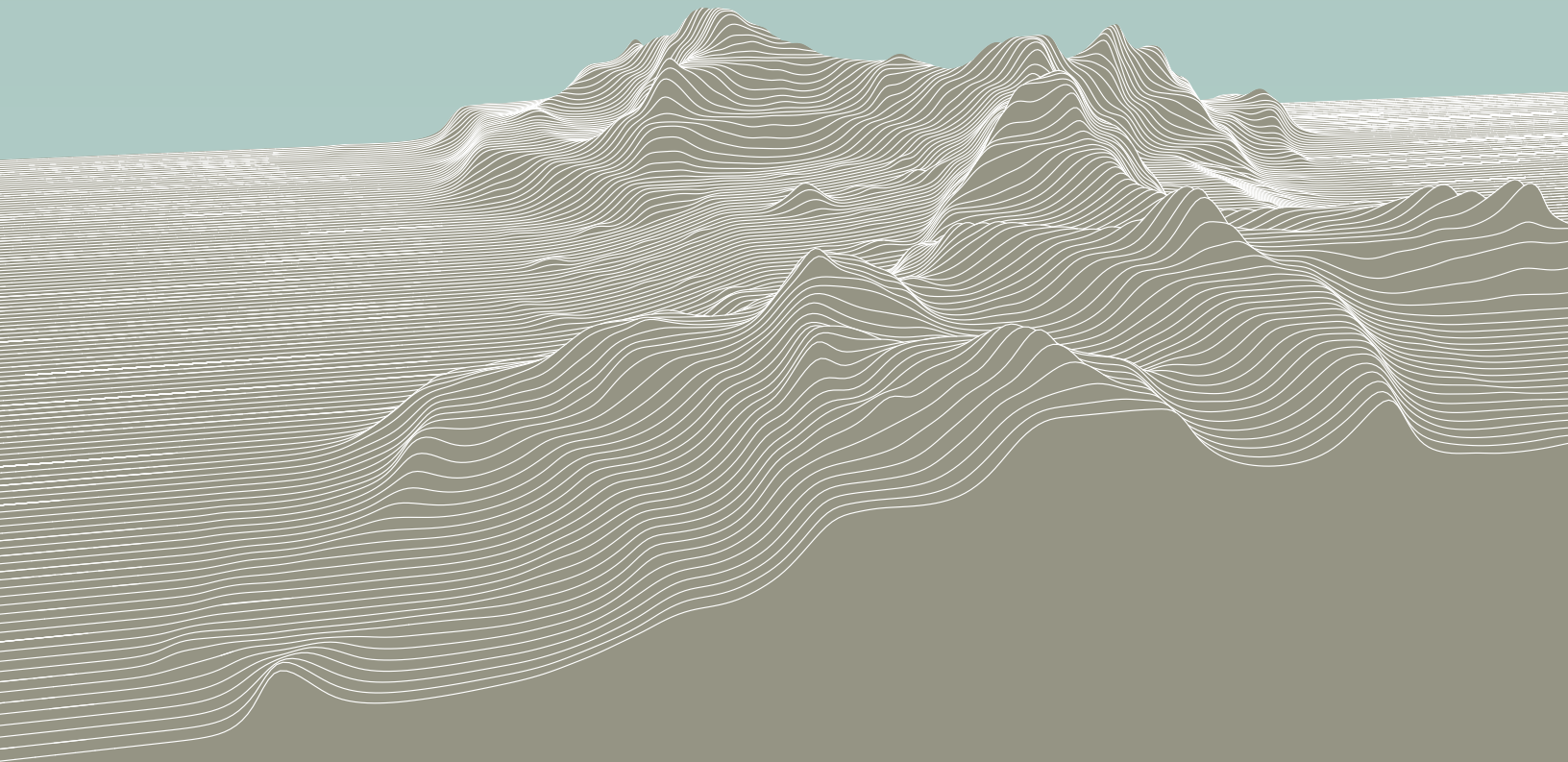
Canadian Exploration Expenses

The *Income Tax Act* permits a 100% deduction for Canadian Exploration Expenses during the year in which they occur. These expenses include costs incurred while determining the existence, location, extent or quality of a mineral resource. Unused balances can be carried forward indefinitely or transferred to investors as flow-through shares.

The government can strengthen support for earlier stages of the mining cycle by expanding Canadian Exploration Expenses to include technical and feasibility studies. This would help de-risk exploration and keep new projects moving forward.

SECTION 4

The People: Safety, Employment and Costs



The mining industry directly provides jobs for more than 710,000 Canadians directly and indirectly – more than 3% of the national workforce. The demand for minerals and metals is growing, and employment needs will grow with them. A diverse, skilled and knowledgeable mining workforce will make sustainable growth of the industry possible.

To find the workers it needs, the industry must diversify its workforce. Over the next decade, mining will need to hire at least 135,000 new employees in upstream mining and quarrying alone.⁵⁶ Increasing the proportion of women and visible minorities will be key to meeting that challenge.

Canada's miners can be proud of their record of accomplishment in Indigenous employment: the industry is, proportionally, the largest private sector employer of Indigenous peoples in Canada. More than 22,600 Indigenous people are employed in the sector, a number that has steadily grown over the past decade. Given the proximity of many mining operations to Indigenous communities, even higher participation numbers should be achievable.

SAFETY

Safety comes first in mining. Canadian mining companies work hard to create a positive safety culture with employees, contractors and communities. The results of this dedication to safety can be seen in the decline in rates of injury across the industry over the past decade.

Between 2014 and 2023, lost time injury rates fell from 279 to 224 per 10,000 employees (down 16%) as shown in Figure 29.

⁵⁶ This estimate is based on the Mining Industry Human Resources Council's (MiHR) definition of the mining industry, which includes fewer workers in downstream manufacturing roles than the broader sector described elsewhere in this report.

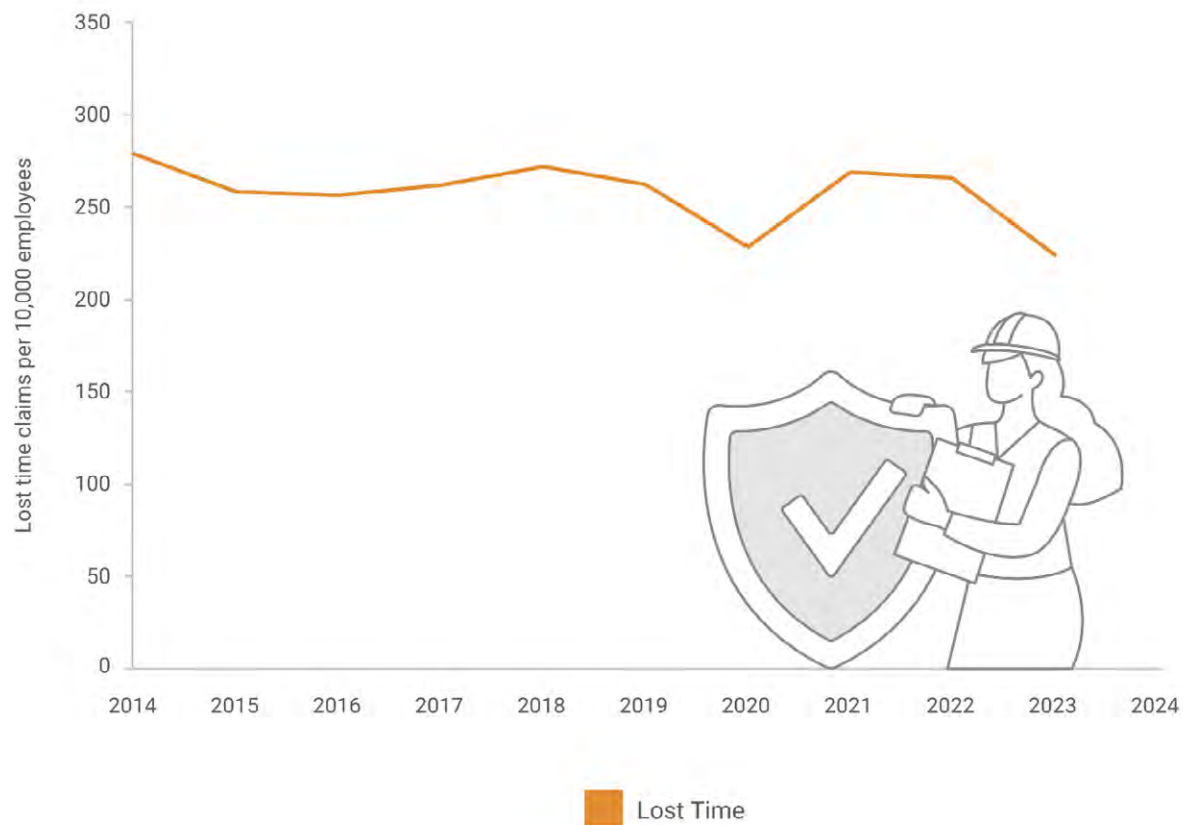


Figure 29: Compensated Injury Rates in the Minerals Sector⁵⁷

EMPLOYMENT

The mining industry directly employed 440,000 people in 2024.⁵⁸ Since the Canadian labour force was about 22.1 million, direct employment in mining accounted for 2% of all jobs, or one in 50.

⁵⁷ From industry-specific data from the National Work Injury/Disease Statistics Program (NWISP) of the Association of Workers' Compensation Boards of Canada and Statistics Canada's Employment by Industry, Annual, Table 14-10-0202-0. Using sector definition that includes NAICS 212, 327, 331, and 332. NAICS 213 (support activities for mining, and oil and gas extraction) was adjusted based on the ratio of 211 to 212.

⁵⁸ Statistics Canada. Table 38-10-0285-01. Natural resources satellite account, indicators (x 1,000,000). Using an average of upstream and downstream employees over the four quarters of 2024.

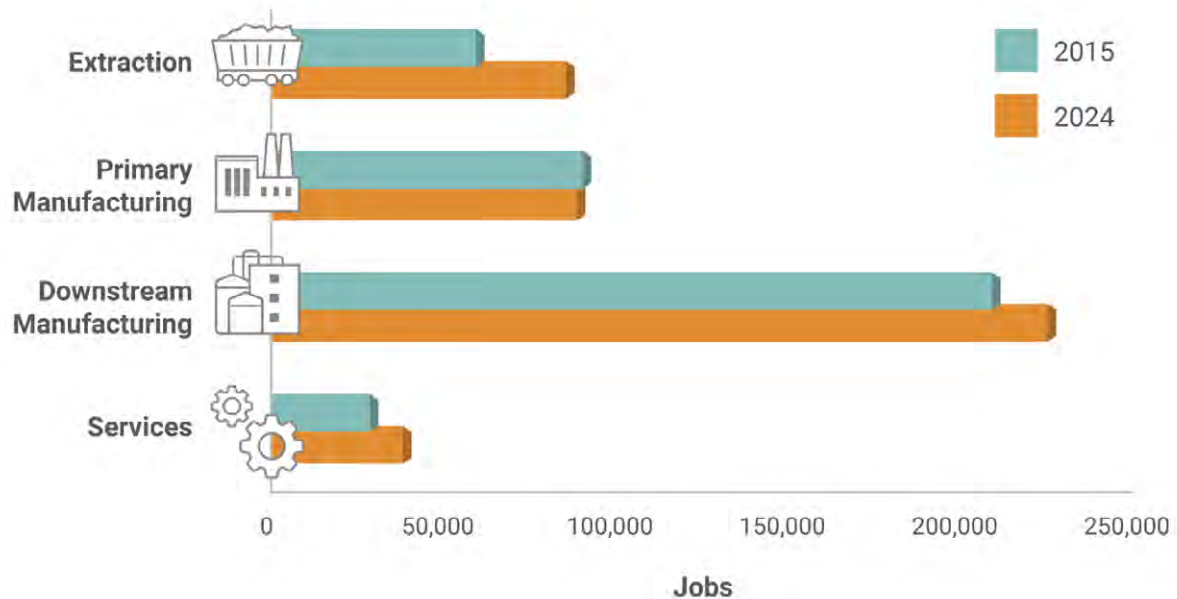


Figure 30: Employment in Mining by Sub-Sector, 2015 and 2024⁵⁹

Employment by subsector is shown in Figure 30. More than half of all employment in the sector is in downstream manufacturing: metal products like steel pipe, cutlery, cable, and more. Extraction and primary manufacturing both make up about 20% of employment in the sector. Services is the smallest subsector, at 9% of the sector's overall employment.

In the decade since 2015, extraction, services and downstream manufacturing have added jobs, while primary manufacturing has had a slight decrease in employment.

The unemployment rate for the mining sector is almost always lower than the national average. In October 2025, the unemployment rate for mining and quarrying was 3.1% compared to a 7.0% for all industries.⁶⁰

New Workers

The Mining Industry Human Resources Council's (MiHR) *Canadian Mining Outlook 2024* estimates that the industry will need to hire a minimum of 135,000 people over the next decade.⁶¹ These new hires are required to replace retirees and fill new positions to meet baseline production targets.

Employees are projected to be required in a variety of jobs across the sector – from trades to production occupations to human resources.

59 Statistics Canada. [Table 38-10-0285-01](#) Natural Resources Satellite Account, Indicators (x 1,000,000)

60 From the MiHR [Monthly Labour Market Dashboard](#). The Council tracks unemployment only for NAICS 212 (i.e., mining and quarrying) and not the larger sector.

61 As above, MiHR tracks only a subset of the larger mining sector. This employment value is functionally upstream only – extraction and milling, support, and primary metal manufacturing.

Both upstream and downstream mining have seen long-term trends towards an aging workforce. In 2023, a quarter of the upstream workforce was 55 or older. For downstream industries, 30% of the workforce was 55+ as shown in Figure 31.

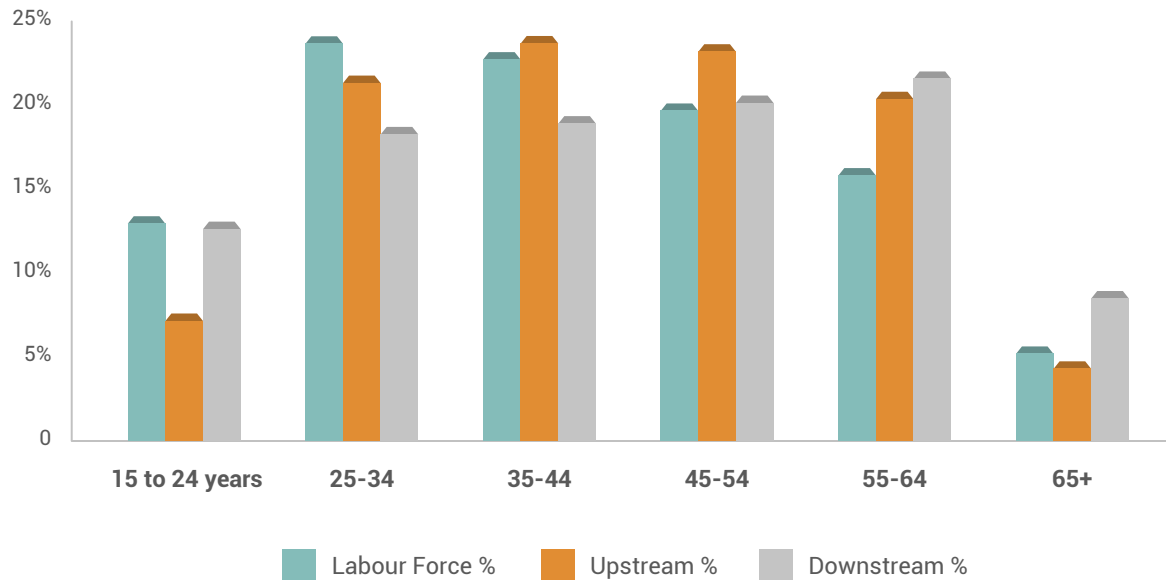


Figure 31: Age Breakdown of Workforce, Upstream and Downstream Mining, 2023⁶²

The aging workforce is a long-term trend in the mining sector. The proportion of workers older than 55 has been increasing in both the upstream and downstream subsectors. In general, the percentage of workers between 15 and 24 has been falling, with a noticeable upward data point in downstream manufacturing in 2023 as shown in Figure 32.

62 Statistics Canada, [Table 36-10-0653-01](#). Employment in the natural resources sector by demographic characteristic.

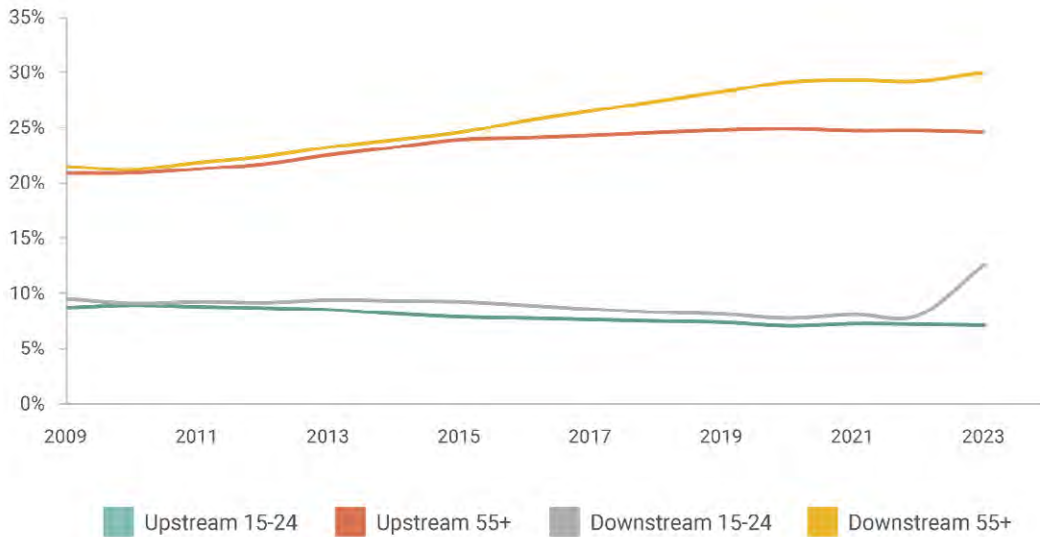


Figure 32: Employment for 15-24 and 55+ in Upstream and Downstream Mining⁶³

Mining Education

The mining sector employs people from the full educational spectrum. In 2023, 41% of upstream employees and 46% of downstream employees had a secondary school diploma or below. The upstream part of the sector employs slightly higher fractions of employees with university degrees, college diplomas and trade certificates than the downstream part of the sector, as shown in Figure 33.

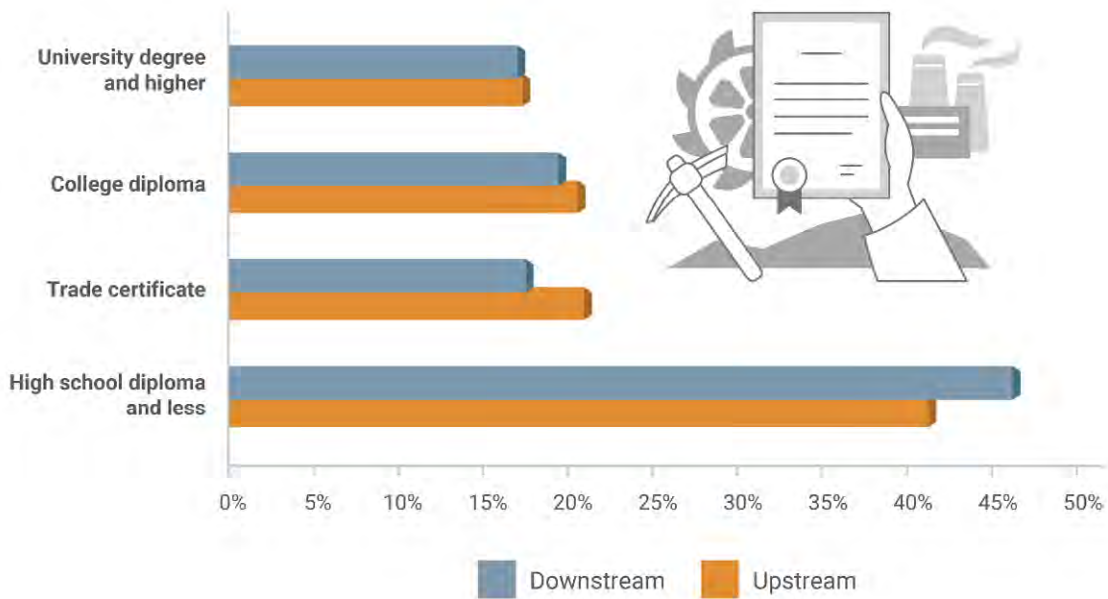


Figure 33: Education in Upstream and Downstream Minerals and Mining Sector, 2023⁶⁴

63 Ibid.

64 Statistics Canada. [Table 36-10-0653-01](#). Employment in the natural resources sector by demographic characteristic.

Educational trends in both upstream and downstream industries have indicated relative stability, with modest increases in employees holding university degrees. For mining and primary manufacturing, the percentage of employees with university degrees increased from 15.6% to 17.3% between 2014 and 2023. Over the same period in downstream manufacturing, employees holding university degrees increased from 16.6% to 17% as shown in Figure 34.

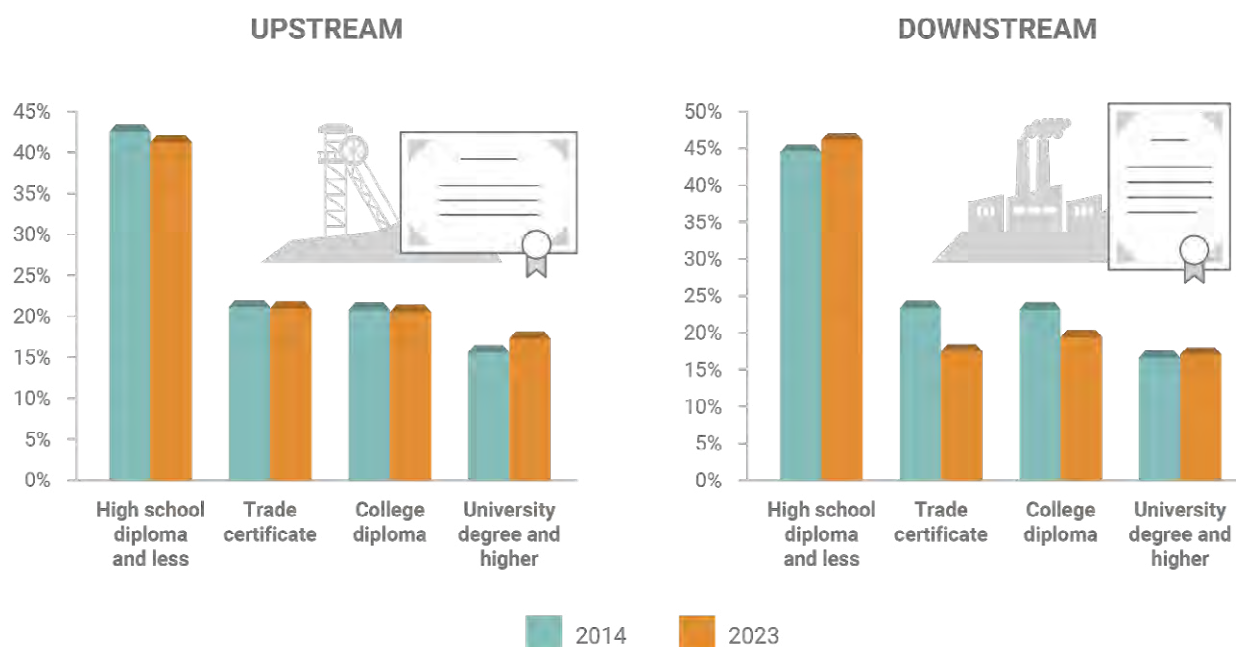


Figure 34: Employee Education in Mining, by 2014 and 2023⁶⁵

Women in Mining

The mining industry has historically been a male-dominated sector. Mining companies across the country increasingly have women occupying senior leadership roles and working at the site level, but there is still significant work to be done to achieve levels of female participation in the industry that more closely resemble those of the overall Canadian workforce.

According to the most recent available data for the natural resources sector, women's representation in employment is lower than in the overall labour force. Women make up 47.1% of the total labour force, but 21.7% of the employees in the natural resources sector, which includes mining, forestry, energy, hunting and fishing and associated downstream industries.

For the mining sector specifically, upstream employees were 16% female and downstream employees were 22.1% female, as shown in Figure 35.

65 Statistics Canada. [Table 36-10-0653-01](#). Employment in the natural resources sector by demographic characteristic.

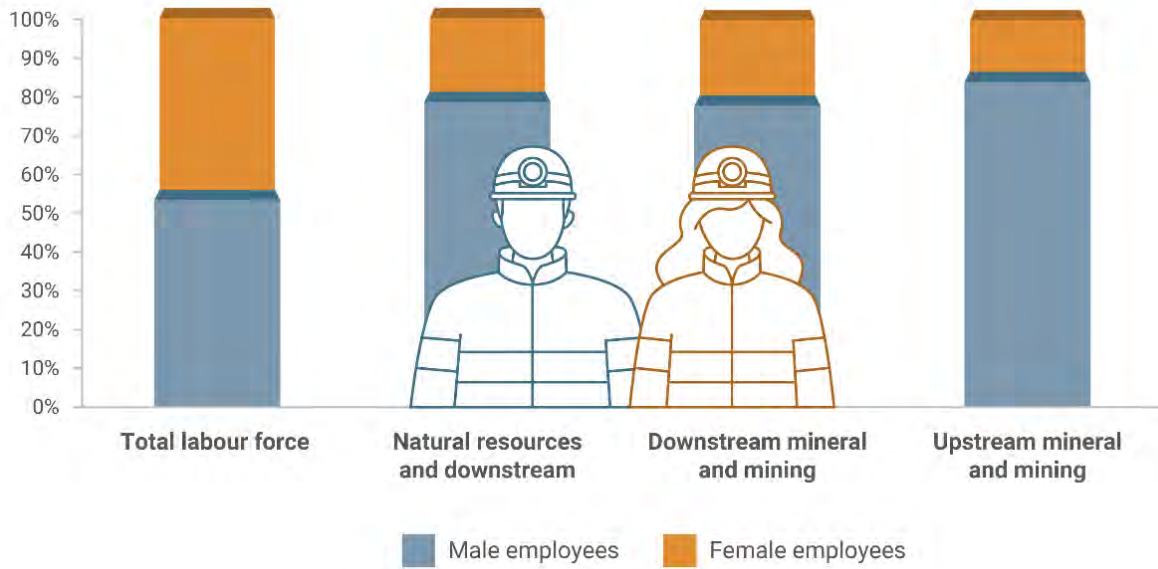


Figure 35: Male and Female Participation in the Mining Industry and the Broader Labour Force, 2023⁶⁶

Trends for both upstream and downstream are for increasing women in mining, but the rate of increase is slow. From 2014 to 2023, the percentage of women in mining employment rose from 15.1% to 16% in upstream mining and from 19.3% to 22.1% in downstream manufacturing as shown in Figure 36.

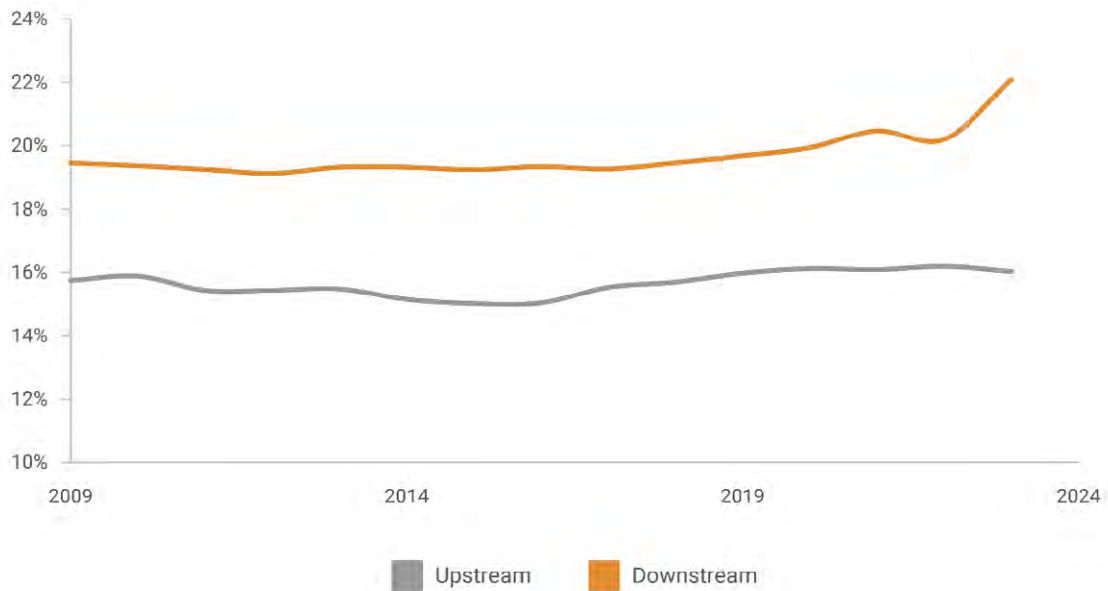


Figure 36: Female Representation in the Mining Sector, 2009-2023⁶⁷

66 Also from Table 36-10-0653-01. Data for the broader labour force from Statistics Canada. Table 14-10-0327-01. Labour force characteristics by gender and detailed age group, annual

67 Ibid.

The *Canada Business Corporations Act* and annual reporting for listed firms on the TSX both require the production of data on women on corporate boards and in executive roles. Osler, Hoskin & Harcourt LLP reviews and summarizes these disclosures every year to produce a report on diversity in Canadian business. The percentage of women directors and board members have both increased since 2020, to 28% for directors and to 17% for executives as shown in Figure 37 and Figure 38.

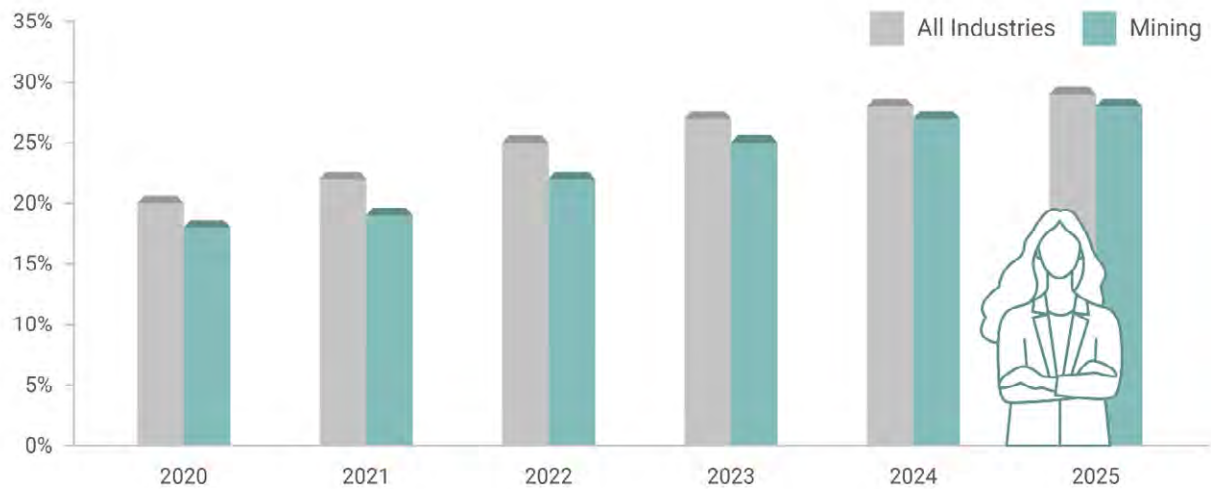


Figure 37: Women Directors in Mining and All Industries, 2020-2025⁶⁸

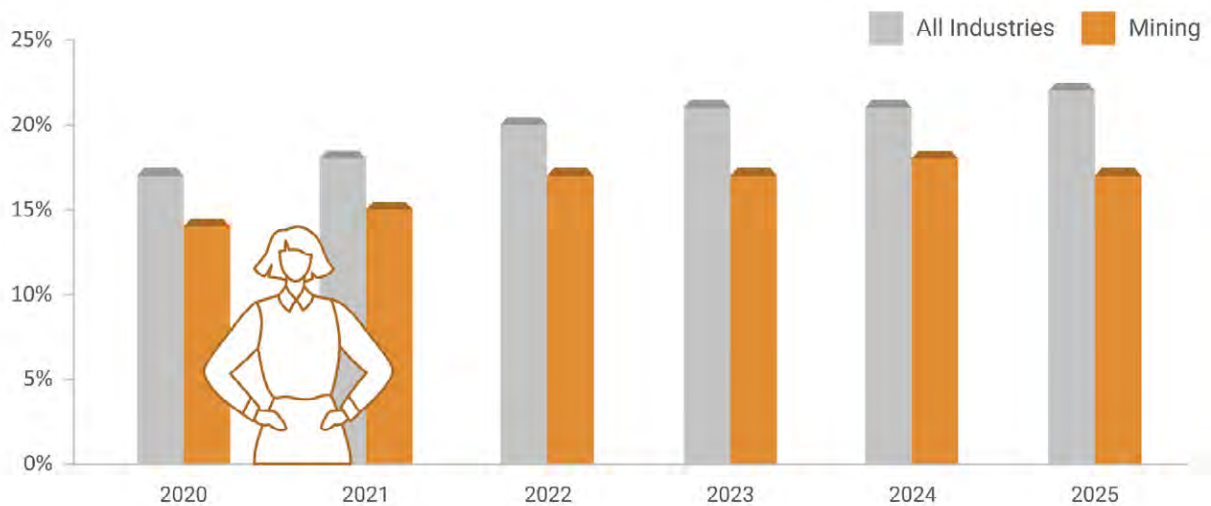


Figure 38: Women Executives in Mining and All Industries, 2020-2025⁶⁹

The industry is making continuing efforts to increase the proportion of women in mining, but success will require efforts at both recruitment and retention.

68 From John Valley, Jessie Armour and Shae-Lynne Shaheen. 2025. *Diversity Disclosure Practices: Diversity and leadership at Canadian public companies*. Also using previous diversity reports by Osler, Hoskin & Harcourt LLP for earlier data.

69 *Ibid.*

Visible Minorities

Statistics Canada expects that immigration will remain the main driver of Canada’s population growth over the coming decades, continuing a trend that began in the early 1990s. By 2041, a quarter of Canadians will be part of a visible minority group, and one in four will have been born in Asia or Africa.⁷⁰ It will be critical for the mining industry to recruit new Canadians and visible minorities to fill the expected hiring requirements of the next decade.

In 2024, visible minorities made up more than a third of the Canadian labour force.⁷¹ The share of the mining workforce made up of visible minorities has also increased but is still substantially below the labour force percentage as shown in Figure 39. Since 2009, both upstream and downstream have increased their employment of visible minorities by about three percentage points.

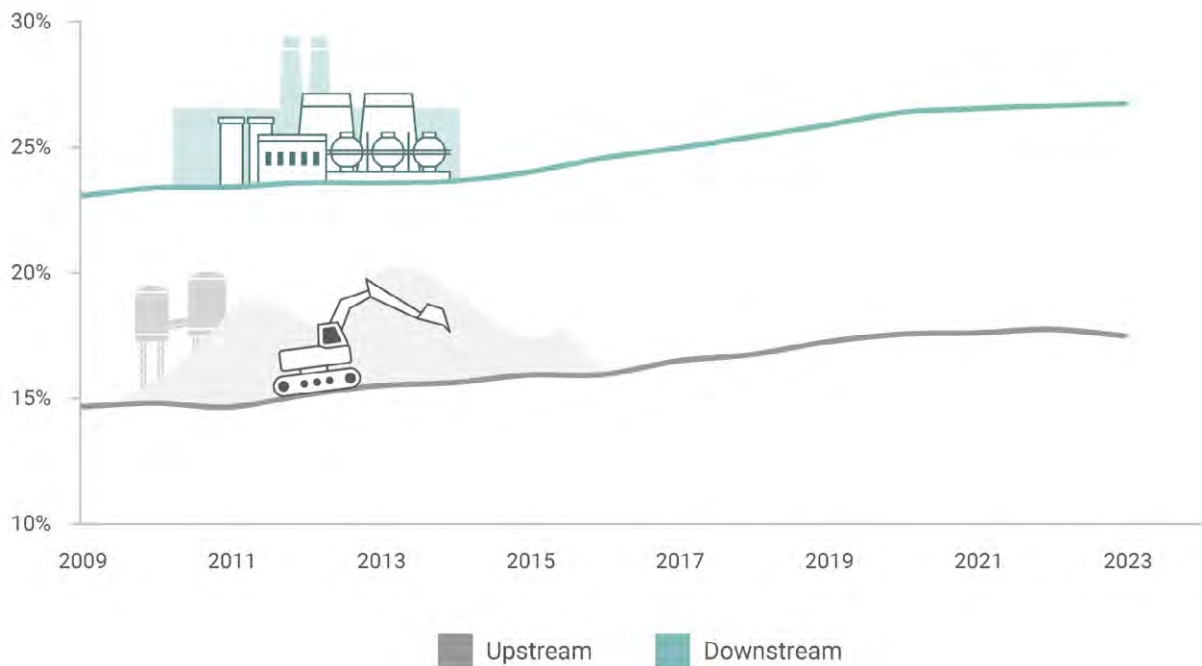


Figure 39: Representation of Visible Minorities in the Mining Workforce, 2009-2023⁷²

Wages

The Canadian mining industry has some of the highest wages and salaries of all sectors in Canada (see Annexes 6 and 7 for details). The average total compensation per job in mining, smelting and refining in 2024 was \$146,858, which surpassed the average for workers in most other sectors. The gap between compensation in mining, smelting and refining and the all-industry average of \$78,098 was more than 88%, as shown in Figure 40.

70 Statistics Canada Daily Bulletin: *Canada in 2041: A larger, more diverse population with greater differences between regions*.

71 Statistics Canada. *Table 14-10-0440-01*. Labour force characteristics by visible minority group, annual.

72 Statistics Canada. *Table 36-10-0653-01*. Employment in the natural resources sector by demographic characteristic.

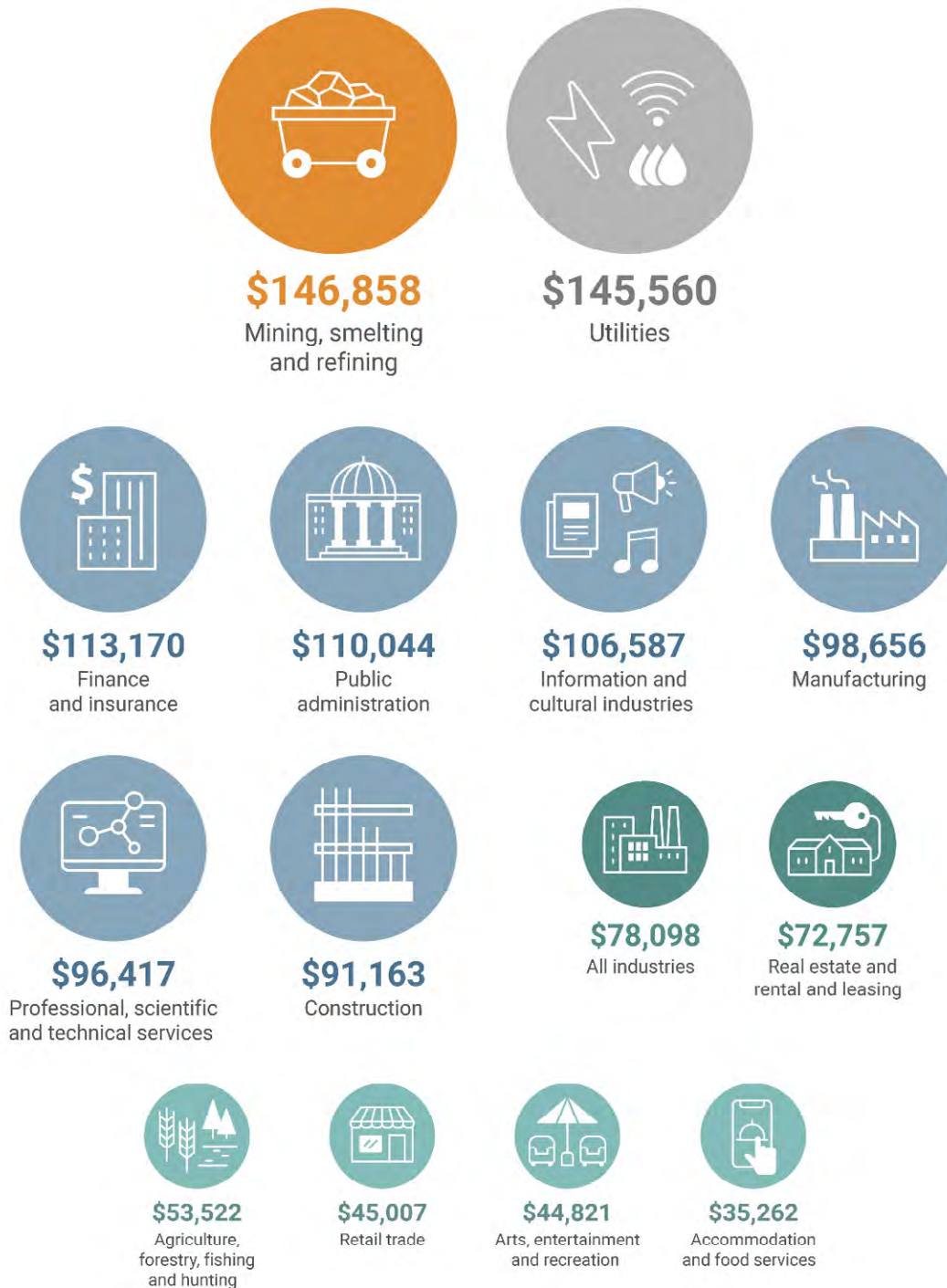


Figure 40: Annual Compensation, Selected Sectors, 2024⁷³

73 Statistics Canada. Table 36-10-0489-01. Labour statistics consistent with the System of National Accounts (SNA), by job category and industry.

Indigenous Peoples

The mining industry is the largest private sector employer, proportionally, of Indigenous peoples in Canada. The most recent information on Indigenous employment in mining and quarrying indicates that more than 22,600 Indigenous people are employed in the sector.⁷⁴ This includes 16,500 in upstream minerals and mining, and 6,100 in downstream industries, as shown in Figure 41. Indigenous employment has increased relatively steadily for a decade in both upstream and downstream areas.

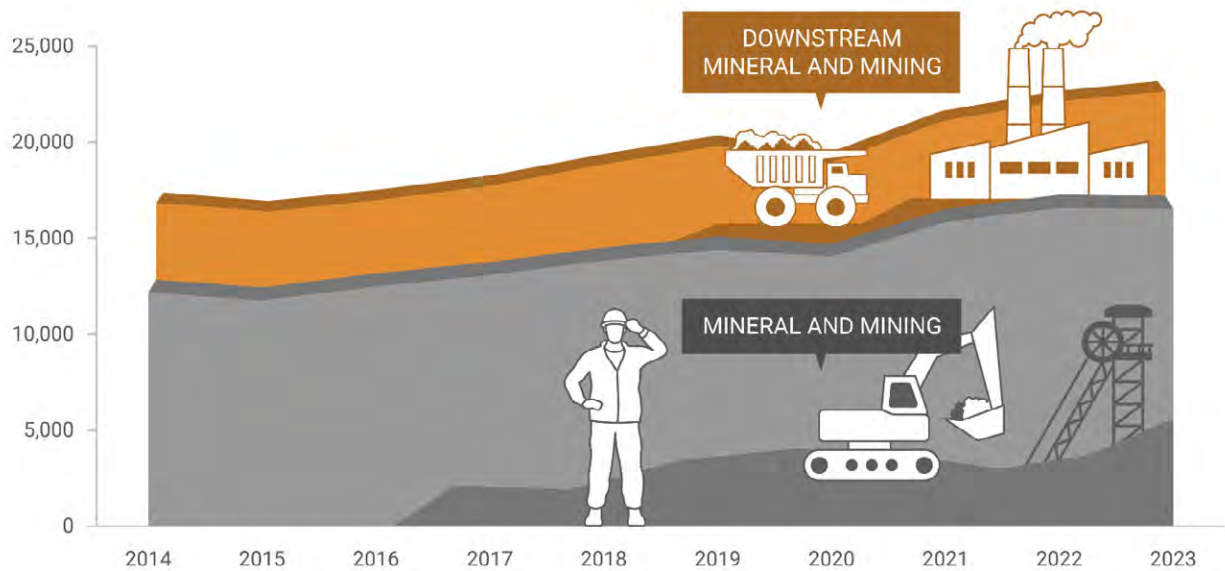


Figure 41: Indigenous Employment in the Mining Sector⁷⁵

Indigenous employees are a key component of the mining workforce across Canada. Indigenous participation in the mining industry is especially high in the territories, with the workforce made up of more than 30% Indigenous employees in all the territories as shown in Figure 42.

74 Statistics Canada. [Table 36-10-0653-01](#). Employment in the natural resources sector by demographic characteristic.

75 Statistics Canada. [Table 36-10-0653-01](#). Employment in the natural resources sector by demographic characteristic.

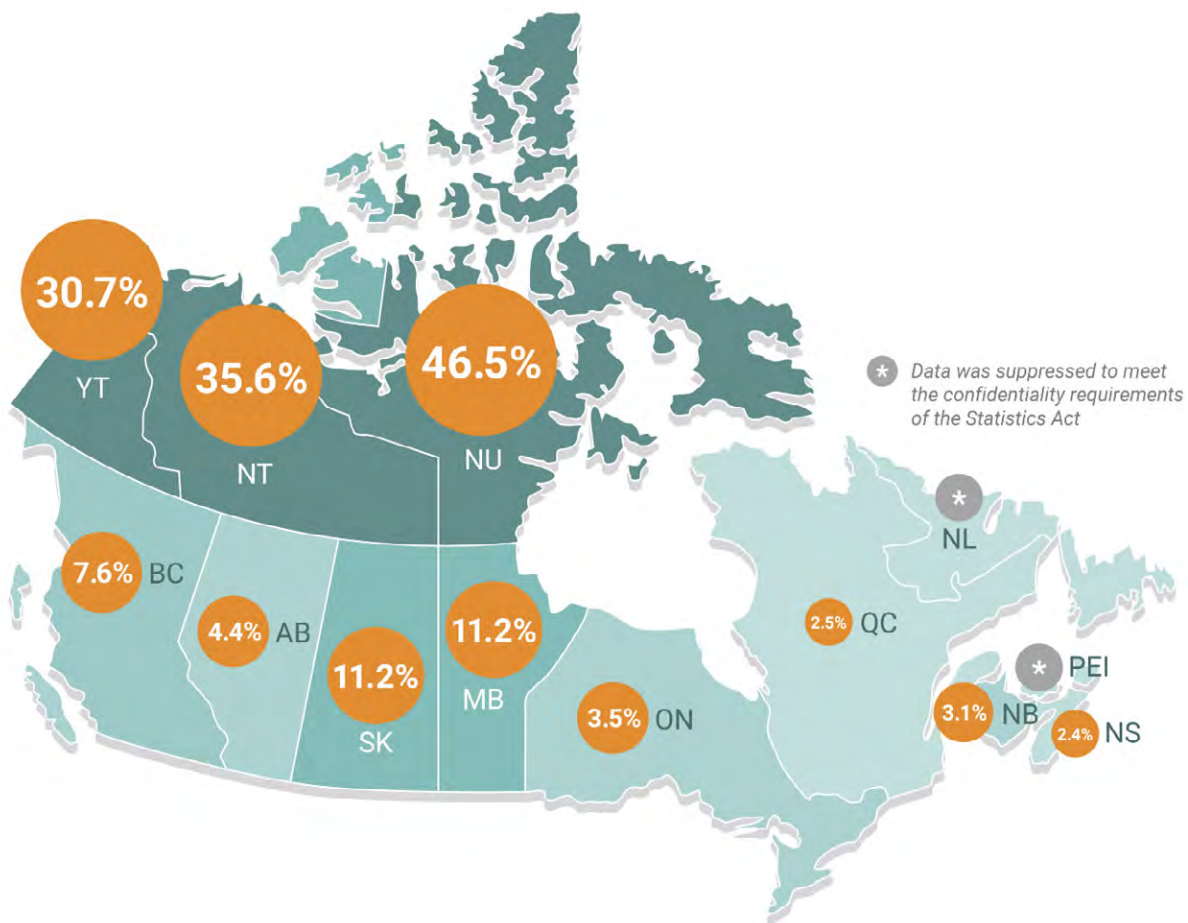


Figure 42: Indigenous Employees as a Percentage of Mining Workforce⁷⁶

Average annual wages and salaries are higher for Indigenous employees across the educational spectrum. Pay in the broader mining, quarrying and oil and gas extraction sector is more than double the all-industry average for employees with a secondary school diploma or less, a trades certificate, or a college diploma. For university graduates, wages and salaries are 87% higher in the sector than in the all-industry average as shown in Figure 43.

⁷⁶ Also from Statistics Canada [Table 36-10-0653-01](#), using both upstream and downstream figures.

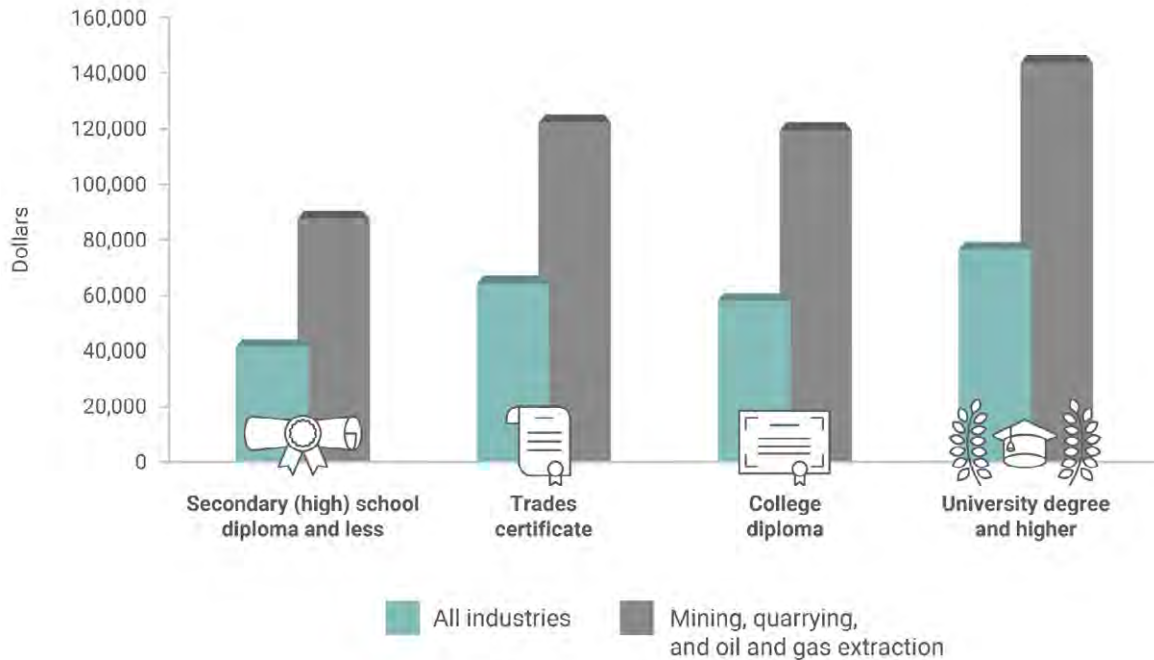


Figure 43: Annual Salary by Education Level in 2023, Indigenous Jobs⁷⁷

Indigenous peoples are increasingly participating in the mining sector as owners. For example, the Nisga’a Nation recently became the majority shareholder the only majority Indigenous-owned, managed and governed royalty company in the world, Nations Royalty Corp. The company’s portfolio includes royalty interests in five mining projects across the Golden Triangle, a remote region of British Columbia with vast deposits of gold, silver and copper. Nations Royalty aims to create more economic opportunities for its Indigenous owners and shareholders while providing industry investors with more options in the Canadian mining sector.⁷⁸

Other recent examples include the Selkirk First Nation’s ownership of the Minto Mine in Yukon and Norway House Cree Nation’s full ownership of the Minago Nickel-Platinum Project in Manitoba.

Between 2000 and 2022, mining companies and Indigenous communities or groups signed more than 500 agreements related to mining.⁷⁹ These agreements cover activities from exploration to mine development and establish the way that companies and communities collaborate. The circumstances of each agreement are different, so the agreements are unique, covering topics like community benefits, employment targets and compensation for adverse impacts.

77 Statistics Canada. [Table 36-10-0696-01](#). Paid worker jobs occupied by Indigenous people in the Canadian economy by employee characteristics and industry. Note that all of NAICS Sector 21 is included here, which captures some oil and gas jobs and excludes downstream manufacturing.

78 Based on Constructive Collaboration descriptions of projects in the Canadian Council for Indigenous Business magazine [Indigenous Business Report](#), Fall 2025.

79 Natural Resources Canada. [The Canadian Critical Minerals Strategy](#).

LOOKING FORWARD

The Canadian mining industry is a globally important source of responsibly mined precious metals, critical minerals, industrial minerals and other mined products. The industry requires a skilled and educated workforce to support the entire value chain, from exploration to recycling.

The next decade will require an increase in young, educated and talented Canadians joining the mining workforce. Industry and government will need to recruit and train employees to ensure that skilled mining staff are available when and where they are needed.

The Mining Industry Human Resources Council (MiHR)

Canada's knowledge centre for mining labour market information, MiHR is an independent, non-profit organization that leads collaboration across Canada's mining sector to analyze and disseminate labour market information and develop human resources solutions.

The mining sector faces unique labour market pressures from volatile commodity markets and complex geological, geographical and social environments. MiHR describes labour market trends, helps identify supply and demand imbalances and proactively develop labour market strategies for the industry. MiHR's research supports the decision making and strategic objectives of mining stakeholders, including governments, employers, and communities.

Members of the Mining Association of Canada provide core funding to MiHR, are actively engaged in MiHR activities, and appreciate the federal government's support of the organization.

Sector-specific labour market information; National Occupational Standards (NOS); worker certification; essential skills and work-readiness training; respectful workplace strategies; and career awareness and development strategies form the backbone of the industry's collaborative and strategic approach to human resource issues.

Long term, sustainable and predictable funding for MiHR from Employment and Social Development Canada (ESDC) and Natural Resources Canada (NRCan) is critical to address mining employment and labour market issues.

Through the Critical Minerals Strategy and the Canadian Minerals and Metals Plan, the Government of Canada has demonstrated recognition of the importance of the nation's mining sector to the economy and our sustainable, clean energy future, and continued ESDC support of MiHR and its programs is critical to the sustainability of the mining sector.

New Workforce Alliances and Sectoral Workforce Investment Funding

In September 2025, the Prime Minister announced the creation of Workforce Alliances and a Sectoral Workforce Investment Fund. These new initiatives are part of a broader government strategy to strengthen Canada's workforce and support strategic industries facing trade pressures. The mining sector has the potential to access this funding to support national and regional labour market needs.

The initiatives will concentrate on sectors experiencing pressure such as auto parts, steel, and aluminum and those with high growth potential, including energy, critical minerals, and advanced manufacturing.

MiHR is ideally positioned to lead the development of a Workforce Alliance for the critical minerals sector in Canada. MiHR already works closely with mining and mineral exploration companies, industry

associations, unions and post-secondary educational institutions to support strategic workforce development strategies for the broader mining sector.

The government should establish a critical minerals Workforce Alliance in close collaboration with MiHR.

Increasing Youth Awareness and Jobs

MiHR's *Mining Needs You* career awareness campaign aims to help youth in Canada see mining as an innovative, challenging and rewarding career choice. MiHR secured \$1 million in funding for the first year, 2025, of an intended five-year national campaign through a coalition of industry partners.

A pilot test of the campaign was implemented in Kamloops and Saskatoon over May and June 2025. Campaign creative was viewed over 12.5 million times by the target audiences. The campaign was adjusted based on the response to the pilot test, and launched nationally in September 2025. The campaign is reaching millions of youth through its many initiatives, including a social media strategy and career ambassador program.

Funding from the Government of Canada will help the Mining Needs You coalition attract and recruit youth to the mining sector.

For eight years, ESDC has provided MiHR with funding for the Gearing Up wage subsidy program through the Student Work Placement Program. Through the program, MiHR has provided 200 mining and mining support services companies with nearly 2,500 student work-integrated learning and co-op placements. The program has been extended through 2025-2026, allowing MiHR to provide funding to support 265 more students.

ESDC should continue to support work-integrated learning through a multi-year extension of the Student Work Placement Program. This program has had a significant impact on students pursuing mining-related education, post-secondary educational institutions and companies in the mineral and metals sector.

Natural Resources Canada's Science, Technology and Innovation Program provided MiHR with Green Jobs support for youth. In 2025-26, MiHR will support 35 youth with quality employment *and skill development opportunities in a green related field in the mining sector.*

Green Jobs has had a significant impact on youth, including those furthest from employment, and companies in the mineral and metals sector. Continued support from Natural Resources Canada will let MiHR continue its work in the area.

Consultation

There has been a long-standing need to review and update the 2011 *Aboriginal Consultation and Accommodation Updated Guidelines for Federal Officials to Fulfill the Duty to Consult*. The Mining Association of Canada is encouraged that efforts to update the guidance are underway. Any revised guidance must be informed by the experiences of Indigenous communities as well as industry proponents.

Meaningful consultation is an essential part of project review and permitting, but there are several process-related challenges.

In the mining sector, significant engagement with Indigenous communities often occurs well before a project enters the federal assessment and permitting process. Unfortunately, this early engagement is not always recognized or integrated into federal consultation requirements. A disconnect frequently exists between provincial and federal approaches, with substantial differences in scope and expectations. As a result, proponents can face a shifting consultation landscape when entering into federal processes. Even more concerning is the lack of coordination among federal departments that proponents often face.

A thoughtful and consistent approach to consultation is needed, aligning the efforts of provincial and federal regulators and proponents. Federal coordination with provinces and territories is essential, particularly in identifying which communities must be consulted.

As governments consider new mechanisms, policies, and guidance, there is an opportunity to address many of these long-standing challenges by working collaboratively to clarify roles and responsibilities, reduce duplication, increase coordination, clarify approaches, and modernize consultation tools.

Indigenous Programs

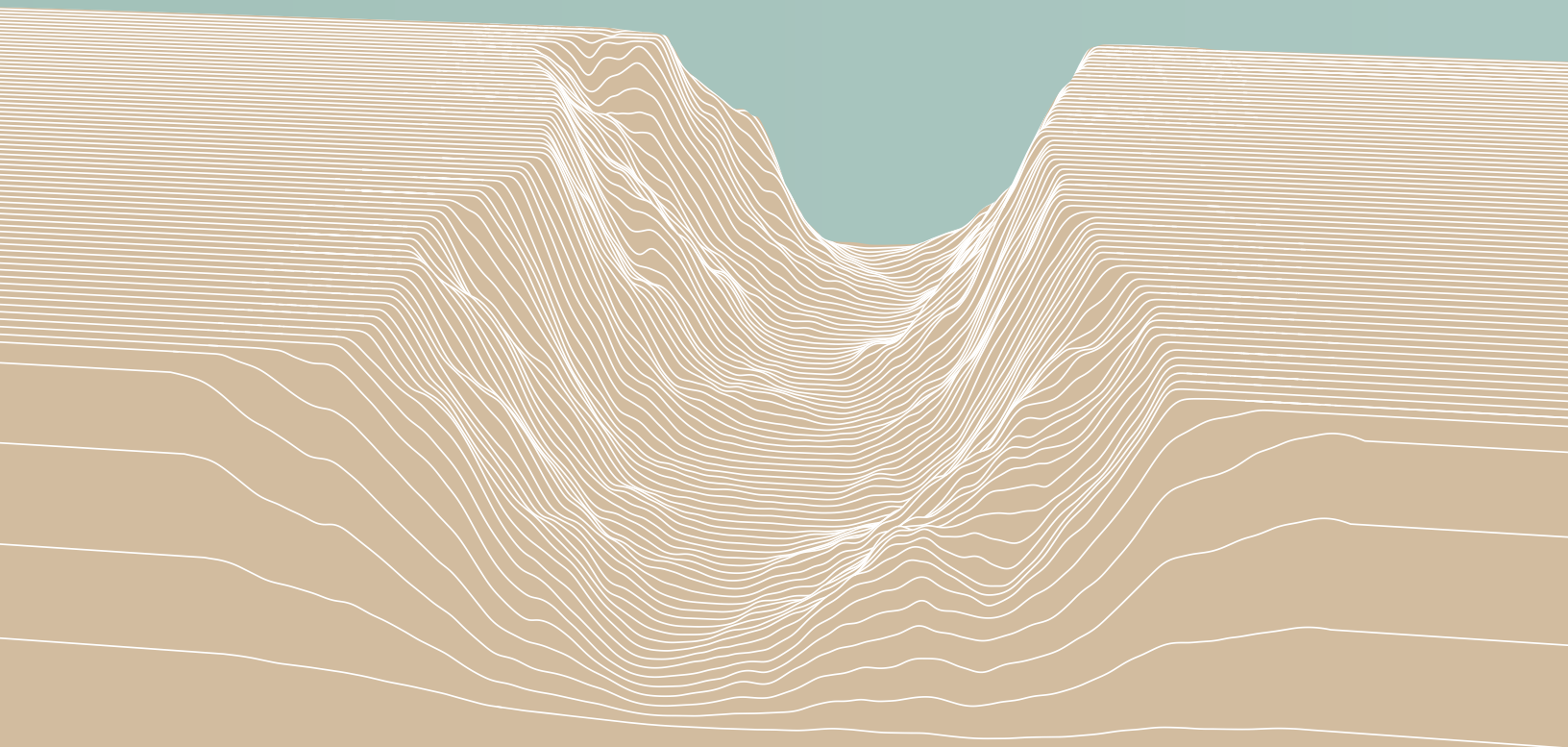
The Indigenous Loan Guarantee Program is an important tool that supports Indigenous communities in accessing competitive capital for investments in natural resource projects and related infrastructure projects. In the mining sector, this includes a wide range of opportunities, from core project equity to investments in ancillary infrastructure and associated energy projects. The Program should remain flexible and accessible to support a broad spectrum of investment opportunities.

The Indigenous Natural Resources Partnerships Program has emerged as an effective mechanism for helping communities build internal capacity and prepare for mining and resource development. However, demand for the program has exceeded available funding. To meet this need, the program should be extended beyond 2026 and supported with increased funding.

Ongoing federal support for Indigenous skills training is very important for the mining sector. This includes continued investment in the Indigenous Skills and Employment Training Strategy and sector-specific programs delivered by organizations such as MiHR. Programs like MiHR's Mining Essentials, a pre-employment training initiative designed for Indigenous participants, provide hands-on learning experiences at mine or exploration sites and help prepare individuals for meaningful and long-term careers in the mining industry.

SECTION 5

The Earth: Energy and Environment



WATER, AIR AND EARTH

The Canadian mining industry spent \$2.7 billion on environmental protection activities in 2022, the most recent year for which data is available. This represents almost a quarter of all capital and operating expenditures across industries tracked by Statistics Canada. Spending on environmental protection increased by 22% between 2018 and 2022, as shown in Figure 44. For methodological reasons, the value for 2022 may be a substantial underestimate of spending.

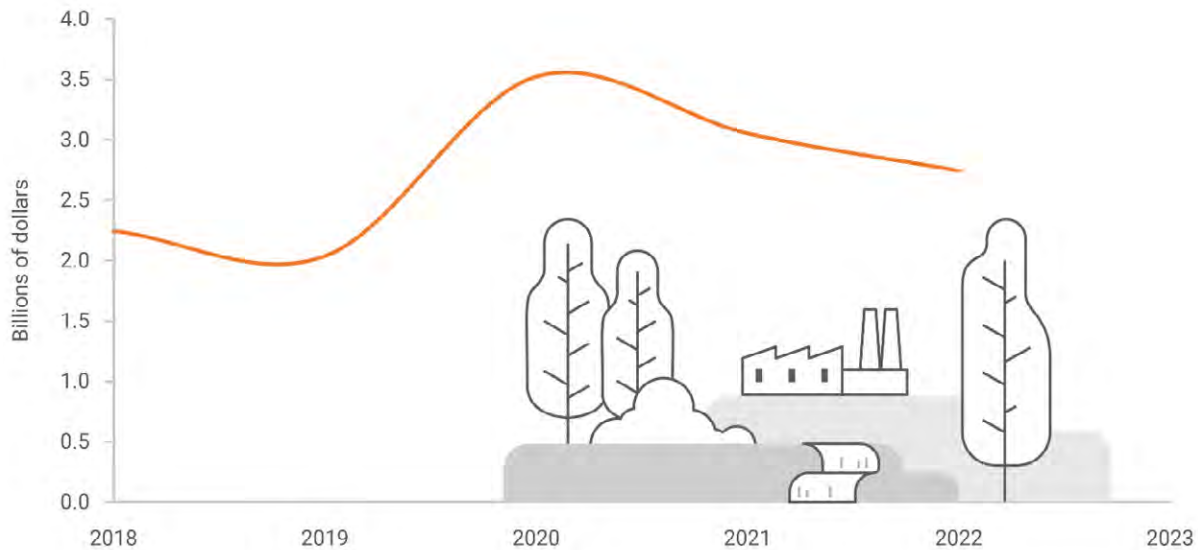


Figure 44: Capital and Operating Expenditures on Environmental Activities in the Mining Industry, 2018-2022⁸⁰

Total capital expenditures on environmental protection in 2022 were \$1.25 billion, the majority of which was spent on wastewater management. There was also substantial capital spending on solid waste (\$157M), air pollution (\$194M) and protection and remediation of soil and water (\$133M). Other expenditures, which included protection of biodiversity, noise and vibration abatement, and clean vehicles and transportation, were \$62 million. Capital expenditures in 2022 are presented in Figure 45.

⁸⁰ Statistics Canada, Capital and operating expenditures on environmental activities by industry Table 38-10-0130-01. Using selected sectors: NAICS codes for mining (2121, 2122, 212326 and 21239) and manufacturing (327, 328 and 331). "Other environmental protection activities" includes the categories Protection of Biodiversity and Habitat, Noise and Vibration Abatement, Protection Against Radiation, Clean Vehicles, and Environmental Charges. Total operating expenses are not reported for Primary Metal Manufacturing in 2022, which means that total expenditures for the sector are underreported by almost \$500 million and possibly much more.

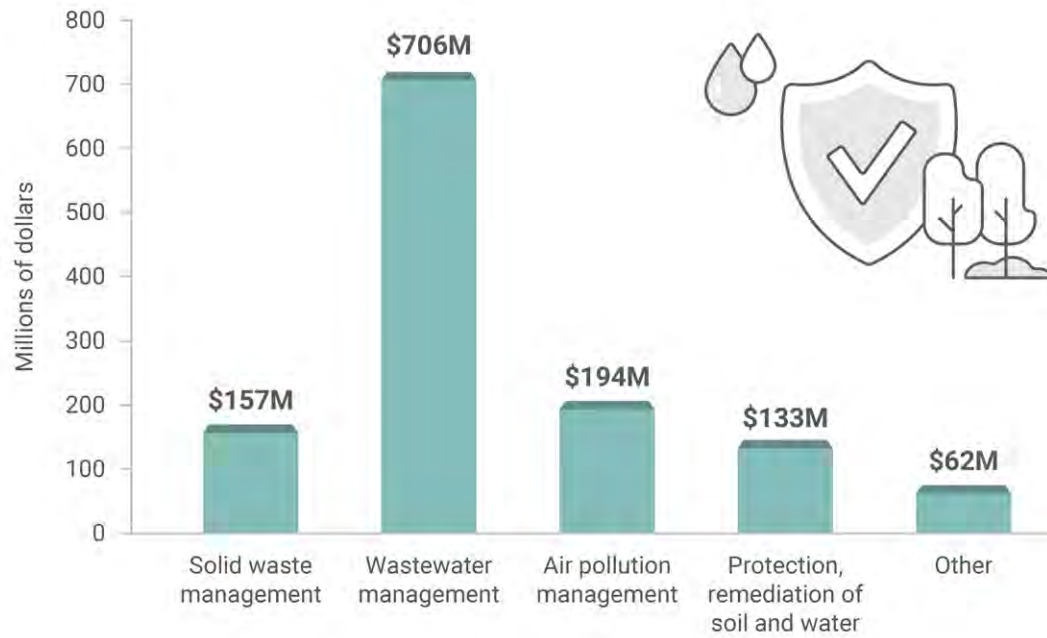


Figure 45: Capital Expenditures on the Environment by the Mining Industry 2022⁸¹

Operational spending in 2022 was at least \$1.4 billion.⁸² Solid waste management (\$483 million) was the largest component of environmental operations spending, as shown in Figure 46.

⁸¹ Also from Statistics Canada [Table 38-10-0130-01](#).

⁸² As noted above, the total operational spending data for primary metals manufacturing was not considered reliable enough to publish by Statistics Canada. Spending subcategories were still provided for primary metals manufacturing, and those values are used here. This results in an operational spending calculation of \$1.4 billion, which is larger than the top-line number of \$1 billion provided by Statistics Canada.

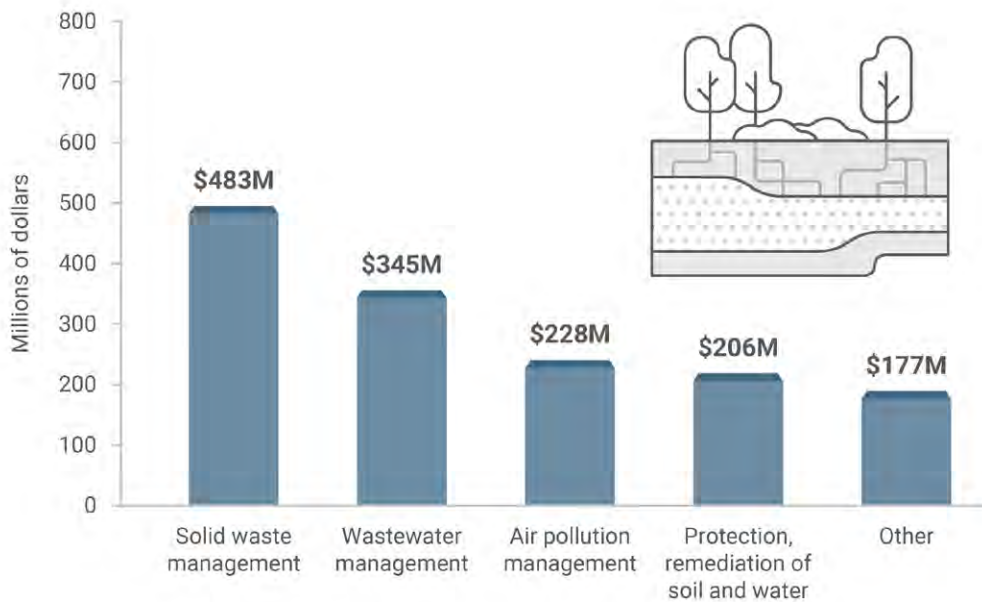


Figure 46: Operational Expenditures on the Environment by the Mining Industry 2022⁸³

ENERGY SOURCES

Mining requires a large amount of energy. A recent study found that ore extraction and beneficiation alone are responsible for 1.7% of global energy use.⁸⁴ Mining's energy use is expected to continue to increase as a fraction of global energy use.

It is expensive to provide energy to mine sites, smelters and refineries, and downstream manufacturing facilities. Increasing energy efficiency is important for reducing costs and for reducing emissions.

Energy consumption for upstream mining comes primarily from three sources: diesel fuel, natural gas and electricity. Sources of energy by value for metal ore and non-metallic mineral mining are shown in Figure 47.

⁸³ Also from Statistics Canada Table 38-10-0130-01.

⁸⁴ Aramendia, Emmanuel, Paul E. Brockway, Peter G. Taylor, Jonathan Norman. *Global energy consumption of the mineral mining industry: Exploring the historical perspective and future pathways to 2060*, Global Environmental Change, Volume 83, 2023.

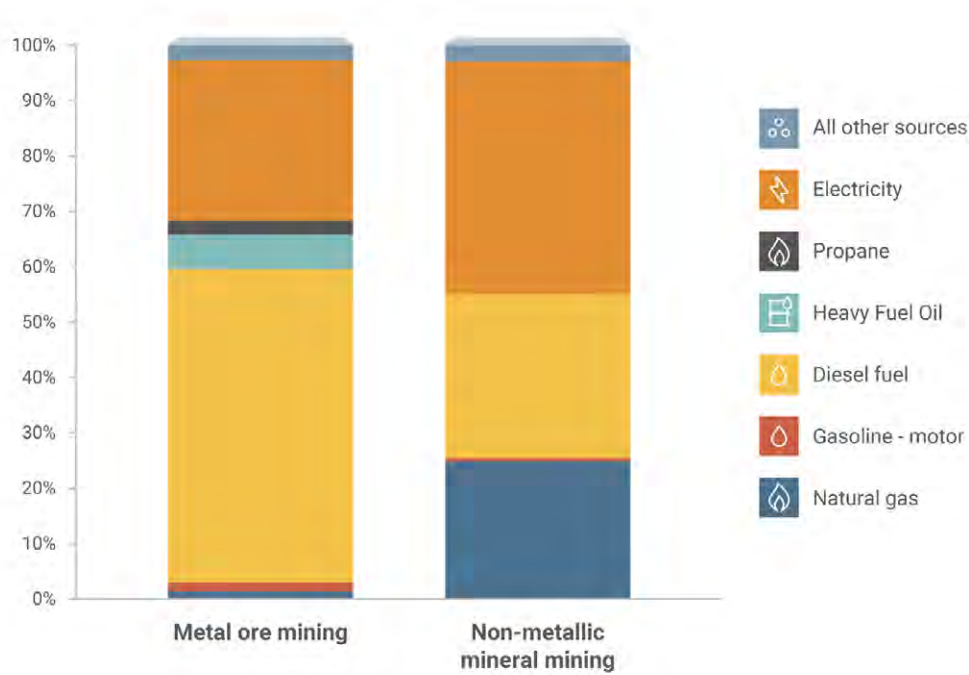


Figure 47: Energy Sources by Dollar Value, Upstream Mining, 2023⁸⁵

While mines are actively moving to battery electric vehicles, most mobile equipment at mines is still powered by diesel fuel. Electricity is typically used for mine ventilation and ore processing, but where mines are not connected to the electrical grid, this electricity is usually from a diesel generator.

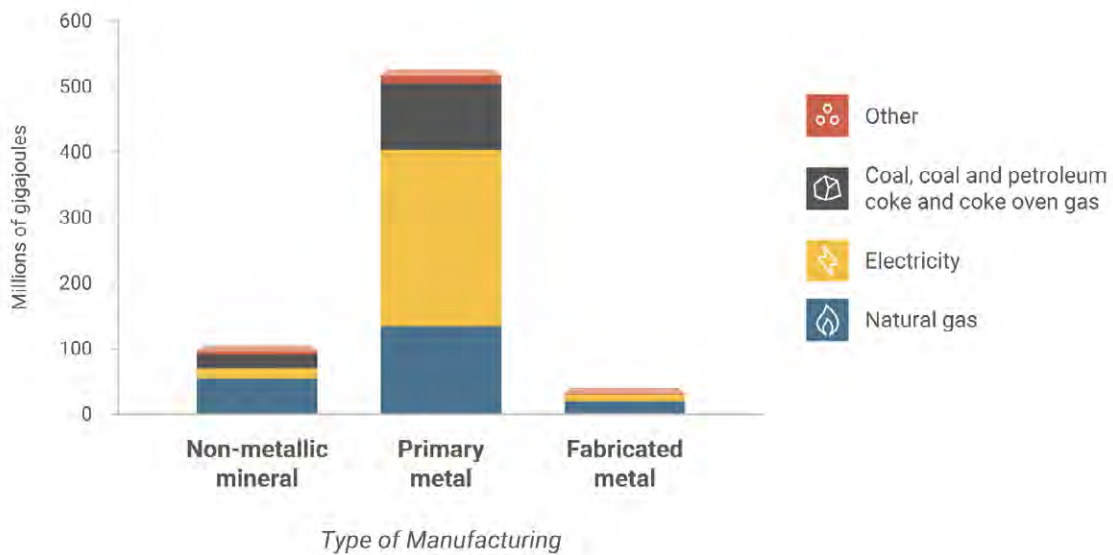


Figure 48: Energy Sources by Total Energy Consumed, Downstream Mining Sector, 2024⁸⁶

85 Statistics Canada. Table 16-10-0029-01. Mining industries, energy consumption by North American Industry Classification System (NAICS), Canada. “Electricity” here means electricity purchased in kWh, including service fees.

86 Statistics Canada. Table 25-10-0025-01. Manufacturing industries, total annual energy fuel consumption in gigajoules, 31-33

For downstream manufacturing, the major energy sources are natural gas and electricity as shown in Figure 48. Coal, coke and coke oven gas are also important energy sources for steel mills.

In non-metallic mineral product manufacturing, natural gas and solid fuel supply heat needed to produce lime, cement, and other products.

CLEAN ENERGY

The clean energy network of the future will be different from the current system, using more renewable resources to create energy. While operating clean energy systems produces fewer emissions than the hydrocarbon-based system we have now, the equipment required for clean energy is more mineral-intensive than equipment used for fossil fuels. Since 2010, the average amount of minerals needed for a new unit of power generation capacity has increased by 50%, primarily due to renewable projects.⁸⁷

The International Energy Agency (IEA) has studied the requirements of the future economy in detail. Using economic and scientific models, the IEA makes projections about how the world will make the change to a lower-carbon future. These studies have included an investigation of the role that minerals and metals will play.

According to the IEA's recent report on critical minerals⁸⁸, demand for key energy minerals continued to grow in 2024: lithium by 30%; nickel, cobalt, graphite and rare earth elements by 6-8%; and copper by 3%. The IEA identified energy applications like electric vehicles, energy storage, renewables and electricity networks as the drivers of this growth in demand.

Rapid production growth in both primary supply and refining in 2024 meant that prices for key minerals remained steady or declined. According to the IEA, "[r]ecent price and investment trends are severely impacting efforts to diversify supply, particularly for refined materials. While production of refined materials has grown substantially to meet rising demand, the vast majority of this expansion has been driven by the dominant suppliers. Between 2020 and 2024, China, the leading refiner of copper and lithium, accounted for approximately 70-80% of supply growth for these minerals, while Indonesia, the top nickel refiner, contributed around 90% of supply growth. For cobalt, graphite and rare earth elements, nearly all production growth was driven by China, further sidelining emerging producers in geographically diverse regions."⁸⁹ Potential tariffs and trade instability also had a distorting effect on price and investment trends.

Future demand for the minerals that support the clean energy transition is expected to be strong, as shown in Figure 49. The IEA has modelled scenarios over the next quarter century, and found that battery deployment, grid expansion, construction and permanent magnets will drive demand.

87 International Energy Agency. 2021. [The Role of Critical Minerals in Clean Energy Transitions](#).

88 International Energy Agency. 2025. [Global Critical Minerals Outlook 2025](#).

89 *Ibid.*

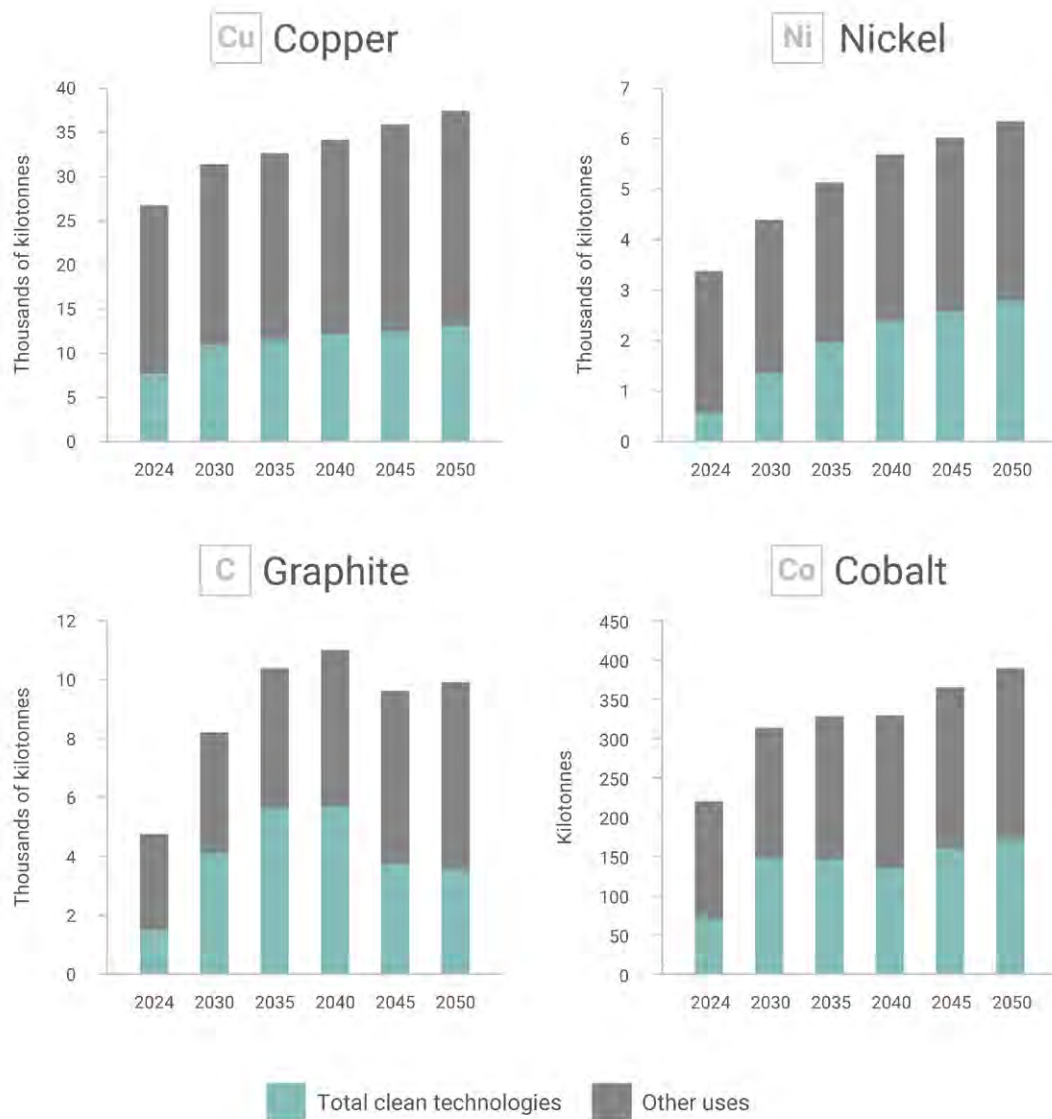


Figure 49: Modelled Demand for Clean Energy Minerals, 2024-2050⁹⁰

One specific example of the transition to a clean economy is in the electric vehicle market. New electric vehicle⁹¹ registrations in Canada reached 440,000 in 2024, an increase from 43,817 in 2017. As a proportion of the total new registrations, electric vehicles have increased from 1.81% in the first quarter of 2017 to more than 25% of new registrations in the fourth quarter of 2024. Between 2017 and 2023, gasoline and diesel engines declined from 97.9% of all registrations to 76.2% of registrations. The end of

90 From International Energy Agency. 2025. *Global Critical Minerals Outlook 2025*. The IEA bases its estimates on multiple policy scenarios. These graphs are based on the *Stated Policy Scenario*, which uses sector-by-sector analysis of national policies to produce a model for future climate change and input requirements. According to the IEA, this scenario “explores where the energy system might go without a major additional steer from policy makers.”

91 Including battery electric, plug-in hybrid electric, and hybrid electric.

the federal consumer subsidy has had some effect on the market for battery electric vehicles in the first three quarters of 2025, but demand appears to have shifted towards hybrid electric vehicles rather than returning to gasoline powered cars and trucks.

Annual vehicle registrations by type are shown in Figure 50.

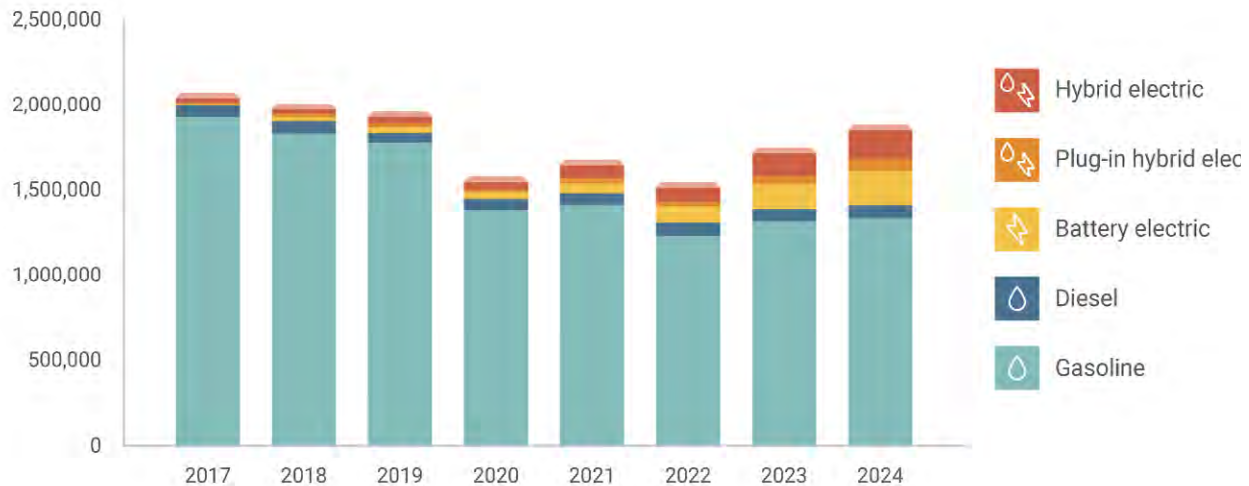


Figure 50: New Motor Vehicle Registrations, 2017-2024⁹²

Because electric vehicles require six times the critical mineral inputs of conventional cars (over 200kg compared to about 40kg), increasing their numbers will require more critical minerals.⁹³

Trends in electricity generation are similar. Wind and solar increased from 1.5% of total Canadian electricity generation in 2014 to 7.8% in 2024 as shown in Figure 51. The shift towards greener energy requires more minerals. For example, onshore wind plants require nine times more mineral resources than a gas power plant of the same capacity.⁹⁴

92 Statistics Canada. [Table 20-10-0025-01](#). New motor vehicle registrations, quarterly, by geographic level.

93 IEA. 2021. *The Role of Critical Minerals in Clean Energy Transitions*.

94 *Ibid*. The IEA finds an average mineral use of 15.4 tonnes of minerals per MW for onshore wind (mostly copper and zinc) and 1.2 tonnes of minerals per MW for natural gas plants (almost all copper).

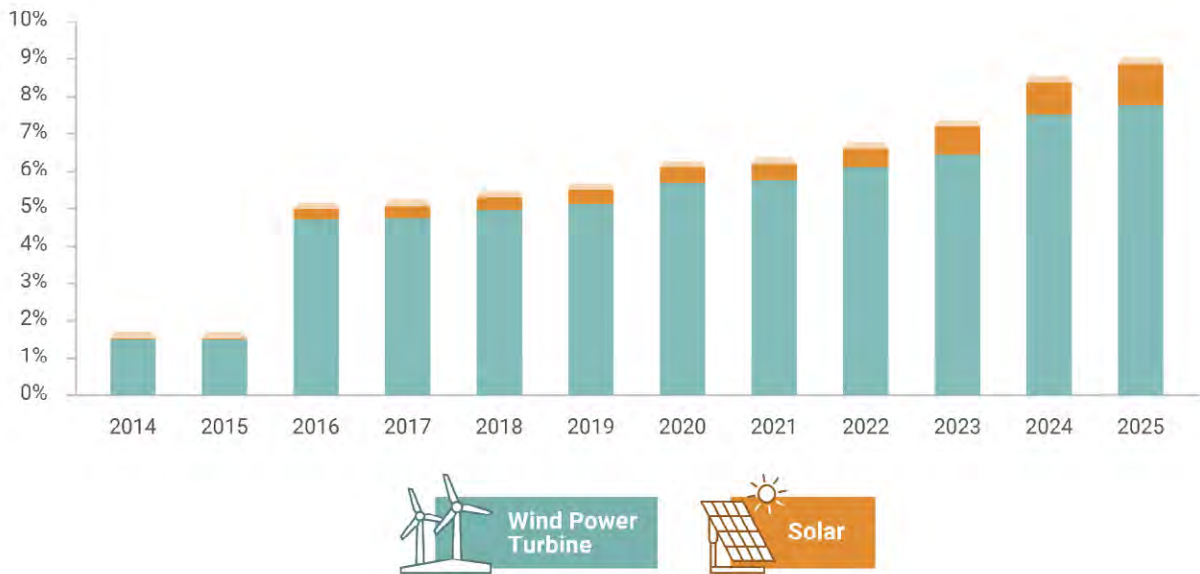


Figure 51: Wind and Solar as Percentage of Total Electricity Generation in Canada⁹⁵

LOOKING FORWARD

The economy of the future needs minerals and metals from Canada. To provide the resources that are required, Canada must create an investment and regulatory environment that works. Given the increasing demand for critical minerals for global carbon reduction, it will be critical to bring new mines into production in the years ahead.

According to a recent report, Canadian mines take an average of almost twenty years from discovery to production, behind only the Philippines and Russia.⁹⁶ Around the world, mine lead times continue to increase: they are now almost three times what they were in the 1990s. This extended duration is attributed to longer periods of exploration, permitting and financing.⁹⁷

The World Bank estimates that the annual demand for the production of some minerals from the energy sector alone will increase by nearly 500% by 2050.⁹⁸ For Canada to increase its production of critical minerals just to retain its current market share, new mines will need to be discovered, permitted, and built. New smelters and refineries will also need to be permitted and constructed. Greater efficiency at moving mines through the permitting process to production will be needed to supply global demand for minerals and metals for the green economy of 2050.

⁹⁵ Statistics Canada. [Table 25-10-0015-01](#). Electric power generation, monthly generation by type of electricity. Data for 2025 is preliminary: data based on production from January through October.

⁹⁶ Manalo, Paul. April 11, 2025. [From 6 years to 18 years: The increasing trend of mine lead times](#).

⁹⁷ *Ibid.*

⁹⁸ Kirsten Hund, Daniele La Porta, Thao P. Fabregas, Tim Laing, John Drexhage. [Minerals for Climate Action: The Mineral Intensity of the Clean Energy Transition](#). International Bank for Reconstruction and Development/The World Bank. 2020. Required 2050 production for energy technologies as a percentage of 2018 total production is 460% for cobalt, 494% for graphite and 488% for lithium.

Climate and Competitiveness

Budget 2025 positions climate competitiveness as a central pillar of Canada's industrial and economic policy. The Government of Canada introduced the Climate Competitiveness Strategy in the budget to guide the next phase of climate and industrial decision-making.

The Strategy aims to link carbon pricing, regulatory alignment, and clean-technology incentives under a single outcomes-based framework that advances both economic growth and emissions reductions. It will focus on ensuring that climate policy supports industrial productivity, innovation, and the competitiveness of Canadian businesses within global supply chains.

The Output-Based Pricing System remains the cornerstone of Canada's industrial carbon-pricing framework. Budget 2025 reaffirms that carbon pricing is a key driver of industrial decarbonization and economic competitiveness, ensuring that large emitters face a consistent carbon cost while retaining flexibility to invest in emissions-reduction technologies.

The Mining Association of Canada supports maintaining a competitive and predictable carbon-pricing system that protects emissions-intensive, trade exposed sectors; recycles carbon revenues into industrial decarbonization; and strengthens the business case for low-carbon investment. Consistent and coordinated carbon-pricing policies will help position Canada as a reliable supplier of responsibly produced materials in a low carbon global economy.

Greenwashing amendments to the *Competition Act*, enacted through Bill C-59 in 2024, introduced more stringent requirements for environmental and sustainability claims, requiring companies to substantiate such claims with adequate and proper testing based on generally accepted scientific methods.

While Budget 2025 acknowledged stakeholder concerns and changes introduced through Bill C-15 were a positive step forward, many MAC members continue to believe the amendments do not go far enough and still create uncertainty for companies seeking to communicate credible environmental information.

A broad coalition of national business associations and sectoral organizations, including the Mining Association of Canada, has called for revisions to the amendments. A lack of clarity in compliance requirements has already led to increased "green-hushing," where companies limit communication of legitimate climate goals and achievements to avoid legal exposure.

The Mining Association of Canada will continue to work closely with its members and the industry coalition to engage with government officials and the Competition Bureau, including engaging the new Commissioner once appointed, to support clarity, transparency, and good-faith environmental communication.

Carbon Border Adjustment Mechanisms (CBAMs) are trade measures designed to prevent "carbon leakage," the movement of production to jurisdictions with weaker carbon regulations, by applying a carbon price to imported goods based on their embedded greenhouse-gas emissions. The European Union has begun phasing in a CBAM, covering imports of carbon intensive products such as steel, aluminum, cement, and certain fertilizers, with full implementation scheduled for 2026.

Canada has signalled interest in a domestic CBAM and continues consultations with industry and trading partners. For the mining sector, CBAMs create both potential advantages and risks. Canada's mines generally operate with a low carbon intensity thanks to a clean electricity grid, so a well-designed mechanism could reward Canadian producers by leveling the playing field with higher-emitting competitors. However, effectiveness will depend on accurate life-cycle carbon accounting, recognition

of Canada's renewable-power advantage, and careful alignment with emissions-intensive and trade-exposed protections. Any mechanism should avoid double carbon charges on exports, protect competitiveness in the United States and other key markets, and ensure compatibility with World Trade Organization rules.

Canada provides a suite of decarbonization funding opportunities, such as investment tax credits and clean-technology programs, that help mining companies electrify operations, switch to lower-carbon fuels, and deploy emissions-reduction technologies. These programs must remain predictable, timely, and easy to access, with streamlined applications, transparent eligibility criteria, and flexible timelines. Such principles will allow companies of all sizes to invest in low-emission technologies without unnecessary administrative burden and ensure that public funding effectively accelerates emissions reductions.

Mine Permitting

Mines in Canada must navigate numerous complex processes before receiving approval to proceed. Canada's historically complex and fragmented regulatory system has long slowed project approvals, limiting the country's ability to respond effectively to urgent economic and security priorities.

Mining projects are subject to comprehensive provincial regulatory frameworks, federal impact assessment regulations, and specific federal approvals under *Fisheries Act* habitat provisions, requirements of the *Canadian Navigable Waters Act*, and the *Metal and Diamond Mining Effluent Regulations*. All mines must also comply with general federal legislation such as the *Explosives Act*, the *Species at Risk Act*, the *Migratory Birds Convention Act* and the *Canadian Environmental Protection Act*.

While some important reforms have been initiated to shorten timelines and demonstrate that Canada is serious about strengthening its competitiveness, systemic inefficiencies remain. Overlapping requirements, duplication across jurisdictions, and poor coordination among federal departments continue to create uncertainty and can lead to unnecessary delays.

At a minimum, action is needed in the following areas:

- **Process improvements for all projects.** Process improvements should extend beyond projects classified as major or of national interest. System-wide efficiency improvements are also needed to ensure timely approval of the ongoing works required to maintain operations.
- **Improved coordination with provinces.** Provincial assessment and permitting processes already assess the biophysical environment, socio-economic and health factors, Indigenous rights and land use, and mitigation measures. The provinces also have regulatory regimes that limit the magnitude and extent of potential environmental effects. Given mining is a well-regulated industry, reduced duplication is possible without diminishing oversight and management of potential environmental and social impacts.
- **Eliminate duplication inside the federal government.** Improved coordination within the federal government between federal assessment and other federal approvals is also necessary. By integrating reasonable information gathering and Indigenous consultation required for various federal authorizations, the approval timeline can be significantly reduced.
- **Process improvements for meaningful Indigenous consultation.** The mining industry is committed to high-quality consultation. Serial consultations by different departments asking for community input on the same project near the same water body, for example, is not conducive to this – rather, it creates burden for both Indigenous communities and proponents.

- **Technical updates to legislation.** The government should implement recommendations of the *Canadian Navigable Waters Act* review and amend the *Physical Activities Regulations* under the *Impact Assessment Act* to significantly increase production thresholds and exclude specific projects.

Impact Assessment

The mining sector is the industry most impacted by application of the Act, out of proportion to the sector's potential effects in federal jurisdiction.

- The application of the federal *Impact Assessment Act* (IAA) to mining projects has long overlapped comprehensive provincial regulatory frameworks, and the longtime promise of “one project one assessment” has largely remained elusive. That said, recent efforts such as the negotiation of new IAA Cooperation Agreements with provinces, signal progress towards this objective. Building on recent initiatives, the following actions should be taken quickly: **Materially amend the IAA Project List.** The criteria in the Physical Activities Regulations (The Project List) under the IAA should be re-calibrated using a risk-based approach to ensure that federal impact assessment is applied only to projects likely to have potential for significant adverse effects in areas of federal jurisdiction. At a minimum, the Project List should significantly increase production-based thresholds for new mines and mills, align production thresholds for uranium with other metals, apply thresholds only to greenfield projects, and exclude facility expansions.
- **Ensure the focus on effects in federal jurisdiction is embedded in policy and reflected in practice.** There have been notable efforts by the Agency to better tailor assessments to focus on effects within federal jurisdiction. Appropriate tailoring must continue consistently so that federal impact assessments remain focused on the right issues.
- **Leverage provincial and federal regulatory processes.** The federal government has been enthusiastic about the prospect of federal-provincial agreements under the IAA. Until recently, only one agreement had been established, with British Columbia. Cooperation agreements with New Brunswick, Ontario, Prince Edward Island and Manitoba were recently released, and additional agreements with other provinces are anticipated. While formal agreements are ideal, the federal government does not require formal agreements to recognize and leverage evaluations conducted by provincial frameworks or other federal entities to understand potential effects within federal jurisdiction. Recognition of provincial mechanisms should be built into all phases of the federal impact assessment process.

Fisheries Act

The *Fisheries Act* impacts new mining projects and existing mines and mills in most parts of Canada. Amendments to the Act in 2019 expanded the authority of Fisheries and Oceans Canada (DFO) to create compliance tools for routine projects with no or little impact. The intent was to provide more consistent protection of fish habitat while reducing the administrative burden on proponents and the department.

In 2026, essential tools such as the *Prescribed Works and Waters Regulations* (PWWR) and new or updated Codes of Practice remain outstanding. This delay has caused backlogs and increased wait times for routine, low-risk projects like culvert replacements.

Recent legislative developments like the *Building Canada Act* signal a shift toward more targeted, outcome-focused regulatory tools. DFO's Red Tape Report reflected a commitment to streamlining project requirements, and Budget 2025 committed DFO to reducing reviews and formal authorizations required for small, routine, low-risk projects.

The principles of clarity, efficiency, and coordination should guide the implementation of the federal permitting system, including projects subject to the *Fisheries Act*. Key issues of concern for the mining industry include:

- **The regulatory burden on low-risk, routine projects.** A significant portion of works currently requiring site-specific review are routine, low-risk activities with well-established and effective mitigation measures. DFO should prioritize the timely development of practical compliance tools for these works, including new and updated Codes of Practice and the long delayed PWWR.
- **Absence of Prescribed Works and Water Regulations.** Despite substantial consultation initiated in 2020, there is no implementation plan for the PWWR. The absence of clear timelines, deliverables, and accountability mechanisms perpetuates regulatory uncertainty and impedes industry planning and investment.
- **Fragmented Oversight and Duplication.** Proponents face overlapping and inconsistent requirements between DFO and other federal regulators. This fragmentation adds to the burden on Indigenous communities, many of whom face consultation fatigue. A more coordinated approach is essential to reduce confusion and foster meaningful engagement.
- **Departmental Culture.** DFO should adopt a results-based approach to regulation, establish clear service standards, and streamline review processes to enhance regulatory efficiency. Oversight should be grounded in a risk-based framework that ensures regulatory effort is proportionate to potential environmental impacts.

Canadian Navigable Waters Act

Since coming into force in 2019, Transport Canada moved quickly to put in place an efficient review and approval system for works on navigable waters, and to disseminate guidance and answer questions. However, the *Canadian Navigable Waters Act* has created some timeline challenges for mining proponents. These have primarily arisen when the department is assessing whether there is a reasonable likelihood of transport or travel by Indigenous peoples to exercise their rights – that is, whether a water body is navigable water as defined in the Act – and whether Indigenous rights may be impacted by a work.

The Mining Association of Canada is encouraged by Transport Canada's response to the five-year review of the *Canadian Navigable Waters Act*, particularly the commitment to amend the Minor Works Order to include more low-risk activities. This is an important change that will help focus resources on high-risk projects that have the potential to impact navigation while providing proponents with certainty and a path forward for low-risk works.

Consultation on modernizing the *Navigable Waters Works Regulations* and the *Navigable Waters Bridges Regulations* is ongoing. An improved regulatory definition of “navigable” would provide proponents with certainty when undertaking works on small water bodies.

Determining whether a non-scheduled water body is navigable is complex, especially when the assessment is based on the exercise of Indigenous rights. When required, navigability assessments are followed by Governor in Council orders for exemptions under Section 24(1) of the *Canadian Navigable Waters Act*. This authority could be delegated to the Minister of Transportation for non-scheduled water bodies, reducing delays and increasing efficiency.

Biodiversity

Responsible mining development includes biodiversity conservation. Members of the Mining Association of Canada have a strong track record of investments in robust wildlife monitoring, habitat restoration and contributions to science.

In response to the 2022 Kunming-Montreal Global Biodiversity Framework that was adopted at the 15th meeting of the Conference of Parties to the Convention on Biological Diversity, the Government of Canada has developed a renewed National Biodiversity Strategy. The Canadian Wildlife Service has engaged broadly on the development of the strategy, including bilateral meetings with the Mining Association of Canada.

As the National Biodiversity Strategy is implemented, it is important to keep in mind that Canada has other strategic priorities. Climate change action, reconciliation with Indigenous peoples, the acceleration of Canada's critical minerals sector are urgent priorities for our country. The government should consider the interconnectedness of these strategic priorities and be based on a sound understanding of the strategic socio-economic and environmental trade-offs associated with nature-related programming and protected areas decisions.

Migratory Birds

In 2022, the modernized *Migratory Birds Regulations*, under the *Migratory Birds Convention Act*, came into force. The updated regulations narrowed and clarified year-round nest protections to a targeted subset of species.

While the updated framework provides greater clarity for mining proponents, the regulations continue to limit the ability of proponents to implement alternatives that better serve conservation objectives while still enabling project advancement.

Given this, MAC is encouraged that ECCC has initiated consultation with stakeholders to better understand challenges and explore solutions. This review presents a chance to strengthen the regulations to provide greater flexibility on the relocation of migratory birds, their eggs, and nests when necessary to facilitate land use.

Further, there is an opportunity to build on the strong due diligence practices already in place in the mining sector rather than relying on enforcement discretion. A properly designed incidental take permitting system would ensure that beneficial management practices are consistently implemented while providing proponents with regulatory certainty. Permit requirements should be proportional to risk, along with exemptions for activities that are low risk for migratory birds. Permitting should recognize alternative mitigation or compensation measures where they can demonstrably support the conservation outcomes intended by the regulation.

Species at Risk Act

The implementation challenges of the *Species at Risk Act* (SARA) have become evident for wide-ranging terrestrial species such as boreal woodland caribou, highlighting shortcomings in federal-provincial cooperation, the limitations of a species-by-species approach and the inflexibility with respect to local circumstances. However, there have been encouraging signs that underlying problems are being recognized, and solutions are being explored, such as the uptake of conservation agreements under section 11 of SARA.

In 2024, Environment and Climate Change Canada launched a consultation for an emergency order under section 80 of SARA that would apply to the Val-d'Or, Charlevoix, and Pipmuacan caribou ranges in Quebec.

The area contains five mines and twelve advanced projects, as well as several other exploration efforts. The proposed approach for the Order attempts to limit the impact of the Order on mining activity in these regions, with proposed mining-related exclusions. While this is encouraging, these exclusions may not go far enough to mitigate unintended economic consequences for the mining sector and communities in the region. This will be particularly true if the necessary infrastructure cannot be developed. The unintended result could be a reduction in investor confidence in Canadian mining. Despite the significant mining presence in the Val-d'Or range, the Imminent Threat Assessment published by Environment and Climate Change Canada did not determine that mining is a primary threat to caribou. Mining in Val-d'Or and the surrounding areas are responsible for approximately 2% of disturbance in the range. In Charlevoix and Pipmuacan, mining represents less than 1% of disturbance.

As is the case across Canada, mining is heavily regulated in Quebec, with significant government oversight. Mining projects are subject to provincial environmental assessment and permitting. Additionally, many projects are also subject to federal impact assessment. Unlike some other sectors, if mining activities have an impact on caribou habitat, the legal framework requires mining companies to compensate for their impacts by reforestation of already disturbed areas to help create habitat and zones of connectivity.

Updates to the Canadian Environmental Protection Act

In 2023, the *Canadian Environmental Protection Act, 1999* (CEPA) was updated for the first time in over 20 years. CEPA is Canada's cornerstone environmental legislation, focused on risk assessment and management of existing and new substances, pollution prevention, waste management, and environmental emergencies. The update focused on recognizing the Right to a Healthy Environment (RTHE), strengthening Canada's chemicals management regime, and improving transparency, accountability, and scientific integrity in regulatory decision-making.

While modernization was welcomed, the implementation phase has highlighted growing challenges for regulated sectors.

A key concern is the rapid expansion of information gathering requirements under CEPA and related programs. These requirements often arrive without sufficient lead time or clear guidance, resulting in duplication, administrative burden, unclear policy outcomes and potential for poor data quality.

Companies are being asked to divert significant resources toward compliance and data management rather than on-the-ground environmental improvements. The Mining Association of Canada's priorities are that CEPA's new provisions should be implemented in a scientifically credible and coherent way, and that information gathering is efficient, purposeful, and proportionate to risk.

Oil Sands Mine Water

Under the *Fisheries Act*, there is an absolute prohibition on the release of substances that could be deleterious to fish. The Government of Canada has developed regulations under the Act for some industries to permit the release of wastewater that meets specified effluent criteria. In the absence of such regulations, any activity involving the release of water poses a risk of prosecution under the Fisheries Act.

The Mining Association of Canada has long requested a regulatory mechanism for the release of treated oil sands mine water. Regulations have already been developed for metal and diamond mining, pulp and paper and municipal wastewater.

Because of the absence of regulations, oil sands mines have had to store increasing volumes of water. Mine water and precipitation runoff is stored on site in tailings facilities. The only way to remove the stored water and restore the sites is to treat the water and release it to the environment.

Apart from being a barrier to reclamation, the long-term storage of oil sands mine water results in increasing salinity of stored water over time. Increasing salinity makes water more difficult to treat. Allowing treatment and release of oil sands mine water is an effective way to mitigate the challenges of increasing salinity.

In 2018, Environment and Climate Change Canada (ECCC) communicated its intent to proceed with the development of regulations. Since that time, ECCC has consulted with the Alberta government and established a Crown-Indigenous Working Group on the issue.

The Mining Association of Canada is very concerned by the slow process. Delaying regulations increases costs and risks for operators and for the environment. The regulatory vacuum creates a level of uncertainty that restricts necessary environmental investments by the oil sands sector.

The Mining Association of Canada recommends that the federal and Alberta government to develop a regulatory framework that avoids duplication and inconsistency. ECCC should quickly develop regulations for the oil sands sector under the *Fisheries Act*. Provincial legislation can complement the federal regulations by providing flexible permitting mechanisms, targeting objectives that are outside the scope of the *Fisheries Act*, and providing mechanisms for incorporating input from Indigenous groups.

Proposed Coal Mining Effluent Regulations

For the past decade, ECCC has been developing *Fisheries Act* regulations for effluent from coal mines. The Mining Association of Canada has been engaged throughout the development of the regulations, and has submitted detailed comments at each milestone. The Association has requested more information to justify the proposed numerical values, and an explanation of how the proposed Coal Mining Effluent Regulations would function.

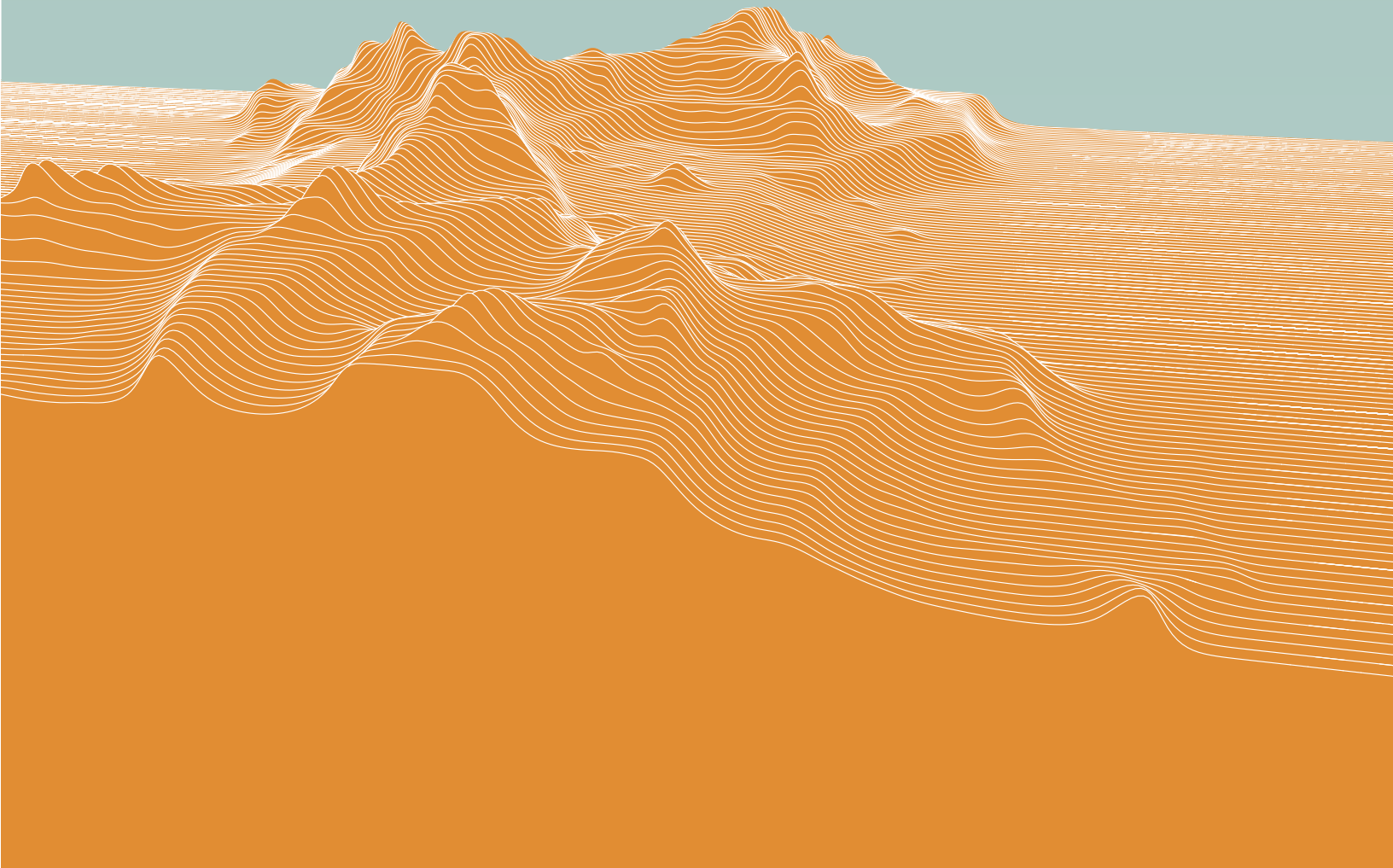
ECCC's most recent version of the proposed Regulations was circulated in 2022. Key aspects of the proposal raised concerns, including the feasibility of achieving discharge limits for selenium, and the proposed in-stream limits for selenium that would apply in the Elk Valley in British Columbia.

Since 2022, ECCC has only engaged with stakeholders bilaterally. There has been limited transparency about ECCC's engagement, and about the results of the engagement. In accordance with Government of Canada policy, ECCC should share its current draft regulatory text with affected parties to allow for informed engagement.

The Mining Association of Canada believes that Coal Mining Effluent Regulations will bring regulatory certainty to the coal sector, but any regulation must be developed transparently and must be workable.

SECTION 6

The World: International Market Activities and Developments



Canada's mining sector is a global leader. Its presence in 95 countries raises living standards and reduces poverty. Canada boasts the industry's most active exploration firms and a capital market that is home to more than half of the world's publicly traded mining companies.

Canada's international mining leadership, powered by innovative and progressive approaches, boosts Canada's strong reputation for sustainable mining and responsible business conduct.

As countries increasingly seek secure supplies of critical minerals for defence and the green economy, Canada is uniquely positioned to provide mineral resources and processing expertise to its allies. Reducing dependence on China for supplies of rare earth elements and other critical minerals will mean increasing production and processing in Canada.

EXPORTS

Canada's mining sector produces valuable goods that are used both in Canada and globally. Mineral exports make up a substantial portion of all of the goods that we export: 21% of the total value in 2024.

Canada's domestic mineral and metal exports in 2024 were \$153.5 billion, a slight increase from 2023. For comparison, this is slightly larger than the value of Japanese automotive exports. The breakdown of exports is shown in Figure 52.

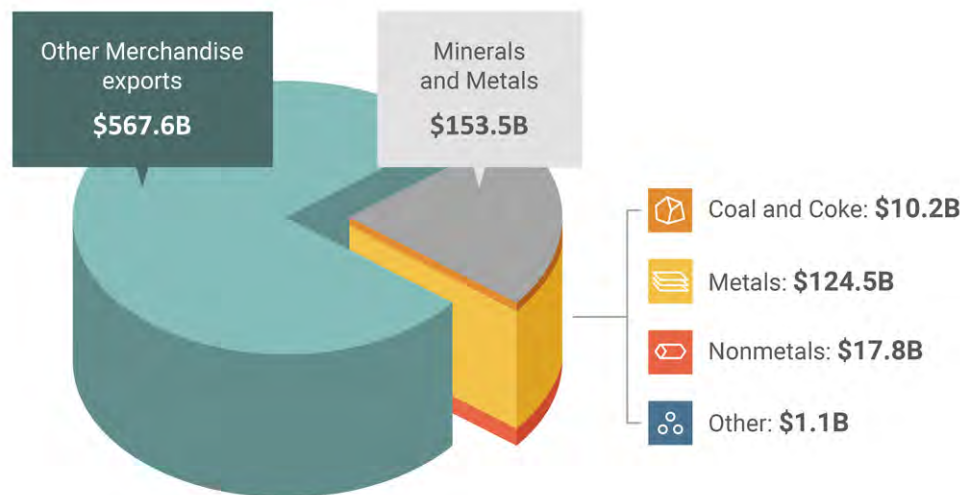


Figure 52: Canada's Exports, 2024⁹⁹

Canada's top mineral exports to the world in 2024 were gold (\$40.2 billion), iron and steel (\$20.6 billion) and aluminum (\$17.4 billion).

⁹⁹ Trade data from Statistics Canada's [Canadian International Merchandise Trade Web Application](#) using Natural Resources Canada's categories for metals, nonmetals and coal and coke.

Gold has become an increasingly important export for Canada. In 2014, Canada exported an average of \$1.37 billion worth of gold every month, or about 3.1% of all merchandise exports.¹⁰⁰ In the first ten months of 2025, Canada's monthly gold exports were worth an average of \$4.3 billion every month, or 6.7% of all merchandise exports. The value of Canada's gold exports over time is shown in Figure 53.

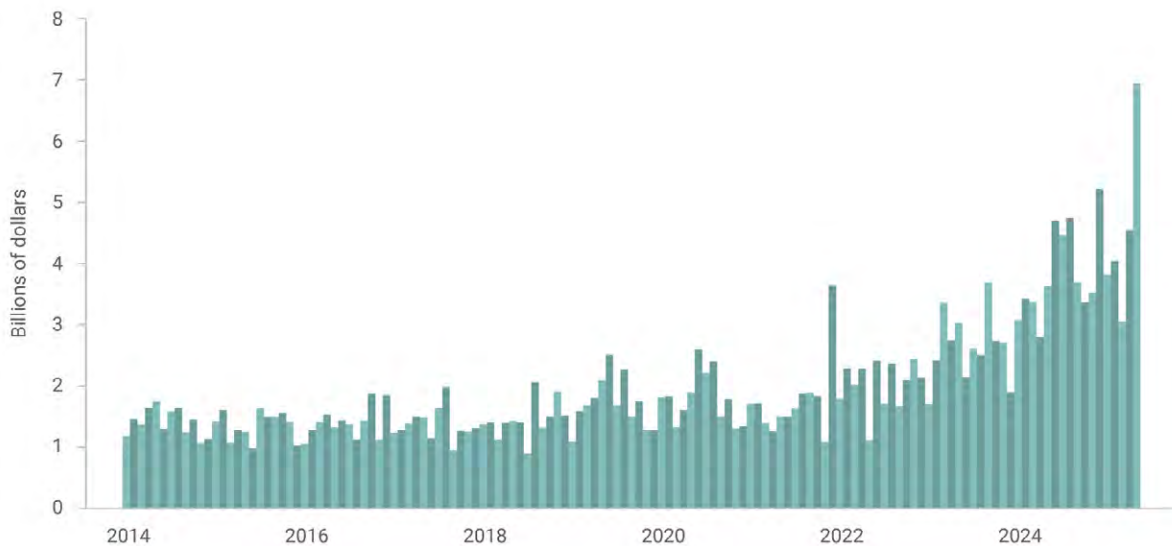


Figure 53: Monthly Gold Export Value¹⁰¹

About half of Canada's mineral and metal exports, \$79.2 billion in 2024, were to the United States, as shown in Figure 54.

Canada's second-largest export market is the United Kingdom, with a value of \$23.2 billion. More than 95% (\$22.2 billion) of Canada's exports to the UK are gold. London is a global financial hub for the gold trade, and substantial amounts of gold are imported there to be traded by international investors.

The European Union was the destination for \$10.9 billion of Canada's domestic exports in 2024. Canada exported \$3.1 billion in iron ore to the EU, more than a third of Canada's iron ore exports. The European market is well served by Canada's St. Lawrence ports, which makes the EU an obvious destination for iron ore. Canada also exported \$1.7 billion in uranium and \$1.0 billion in diamonds to the EU in 2024.

¹⁰⁰ Using the Harmonized System (HS) Heading 7108, Gold (including gold plated with platinum) unwrought or in semi-manufactured forms, or in powder form, Non-Monetary. This heading does not capture all gold exported from Canada (for example, it excludes some waste and scrap) but represents the vast majority of exports. Data from Statistics Canada's [Canadian International Merchandise Trade Web Application](#).

¹⁰¹ *Ibid.*

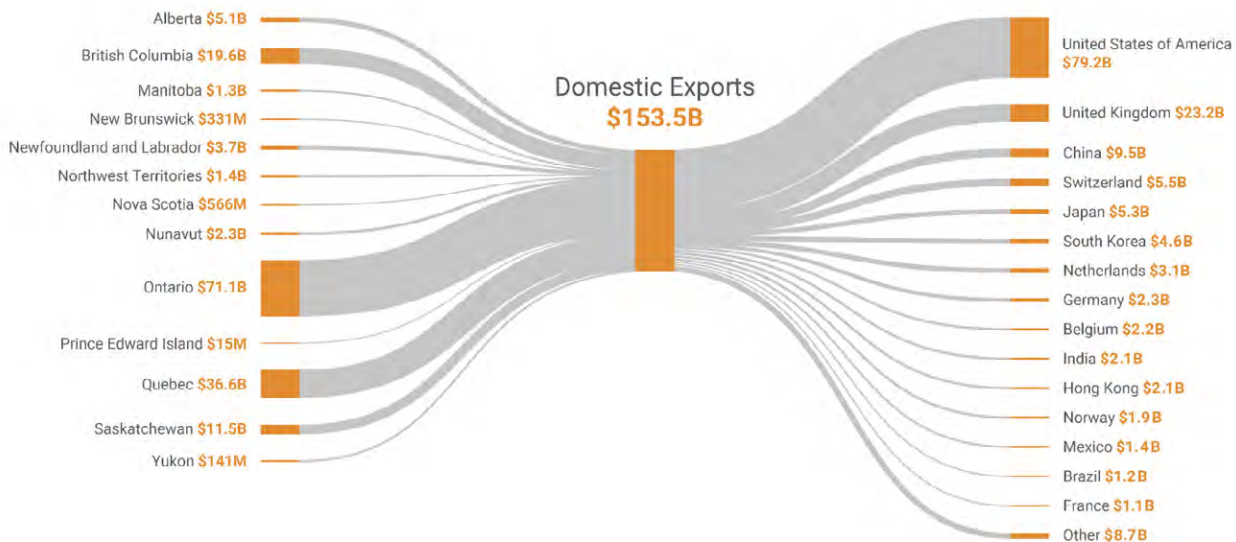


Figure 54: Domestic Exports of Mineral and Metal Products, By Origin and Destination, 2024¹⁰²

Mineral and metal exports account for a fifth of Canadian exports, and are the economic foundation of several regions of the country. For example, mineral exports made up a very large majority of the territories' exports: they were responsible for basically all of the value of the domestic exports¹⁰³ of Nunavut and the Northwest Territories and more than 90% of Yukon's domestic exports. Mineral exports were responsible for more than a quarter of domestic export values in five provinces: British Columbia, Saskatchewan, Newfoundland and Labrador, Quebec and Ontario.

The value of domestic exports of these and other minerals and mineral products in 2024 are presented in Annex 8.

IMPORTS

Canada imported \$125.8 billion of minerals and metals in 2024, including \$1.9 billion worth of coal and coke, \$106.1 billion in metals and \$17.6 in nonmetals. This is a slight increase from 2023, but an increase of 37% from 2019.

In 2024, Canada's top mineral imports were iron and steel (\$32.8 billion), gold (\$19.5 billion), aluminum (\$10.7 billion) and copper (\$6.5 billion). The value of imports of these and other minerals and mineral products in 2023 are presented in Annex 9.

The largest source of Canada's imports (\$57.7 billion, or 45.8% of the total value) was the United States. Other large sources of imports were China (\$14.9 billion, 11.9%) and the European Union (\$11.3 billion, 9.0%) as shown in Figure 55.

¹⁰² Also from the [Canadian International Merchandise Trade Web Application](#).

¹⁰³ "Domestic exports are defined as goods grown, extracted, produced, or manufactured in Canada and subsequently sold abroad to differentiate them from re-exports, i.e., goods from other countries that are imported to Canada and then re-exported without substantial transformation. Definition from Statistics Canada's [International Trade portal](#).

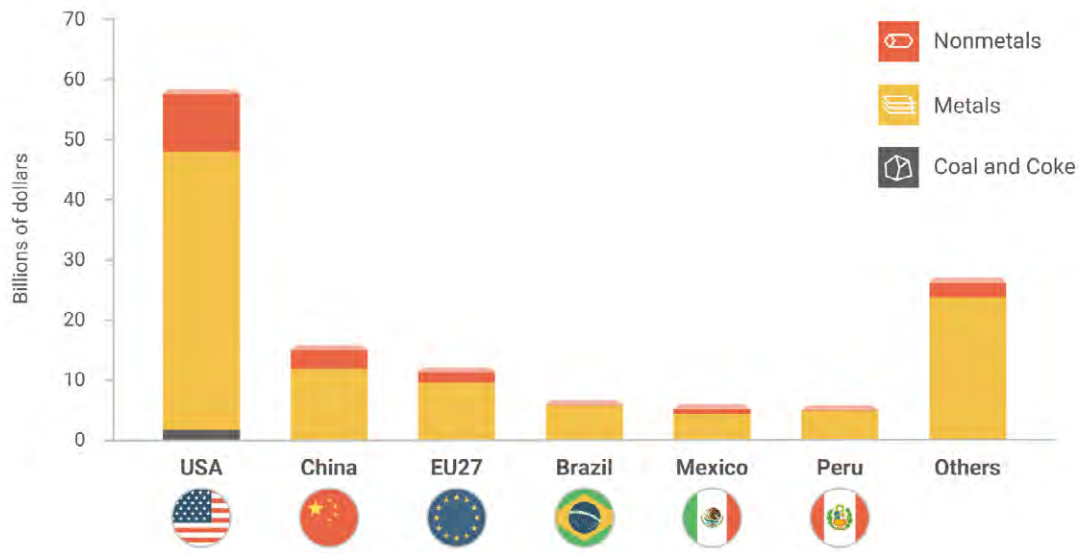






Figure 55: Imports of Mineral and Metal Products, 2024, By Source¹⁰⁴

Stages

Natural Resources Canada separates trade between countries into stages, depending on the level of processing involved.

Stage	Process	Example Outputs
 Stage 1 Mineral Extraction	Discovery, extraction, processing.	Mineral or metal concentrates.
 Stage 2 Smelting and Refining	Metallurgical extraction such as smelting, refining, roasting, calcining, direct reducing and leaching.	Powders, flakes, dusts, cathodes, ingots, pig, blocks and plates.
 Stage 3 Semi-Fabrication	Manufacturing and processing.	Rods, plates, sheets, thin strips, pipes, rails, wires.
 Stage 4 Final Fabrication	Further processing from Stage 3.	Metal framing products, hardware items, tools, cutlery, forged and cast parts, grinding balls, rail parts.

104 Ibid.

Canada’s exports are mostly in the first two stages, which together account for \$106 billion (69% of minerals and metals exports) as shown in Figure 56.

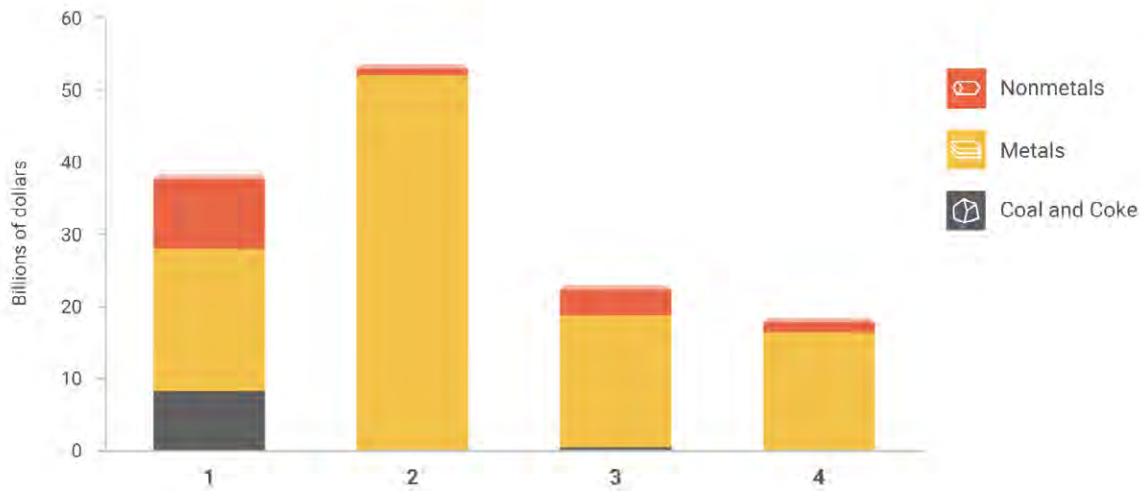


Figure 56: Canada's Minerals and Metals Exports by Stage¹⁰⁵

Imports, on the other hand, are concentrated in the stages which require more processing. Stage 4 imports, at \$55 billion, make up 44% of all imports as shown in Figure 57.

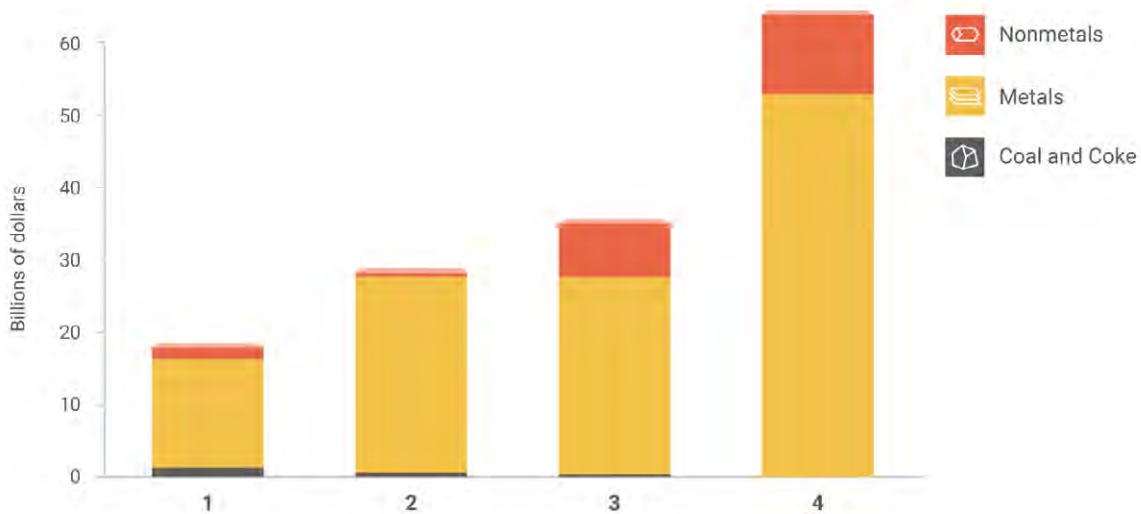


Figure 57: Canada's Minerals and Metals Imports by Stage¹⁰⁶

¹⁰⁵ Trade data from Statistics Canada’s [Canadian International Merchandise Trade Web Application](#) using Natural Resources Canada’s categories for metals, nonmetals and coal and coke.

¹⁰⁶ *Ibid.*

TRADE WITH THE UNITED STATES

The United States is Canada’s largest trading partner. Bilateral trade between the two countries in 2024 was more than \$1.2 trillion, the second largest trading relationship in the world.¹⁰⁷

Metals and minerals are an important part of the trade between Canada and the United States. In 2024, Canada exported \$79 billion in metals and mineral products to the United States, and imported \$58 billion. This \$137 billion in imports and exports of metals and minerals is about the same size as all trade in goods between France and the United States.¹⁰⁸

Canada trades metal and mineral products with every state. Canada’s bilateral trade relationship with 30 states is worth more than \$1 billion per year. Of these, five have bilateral trade of more than \$10 billion dollars with Canada, as shown in Figure 58.

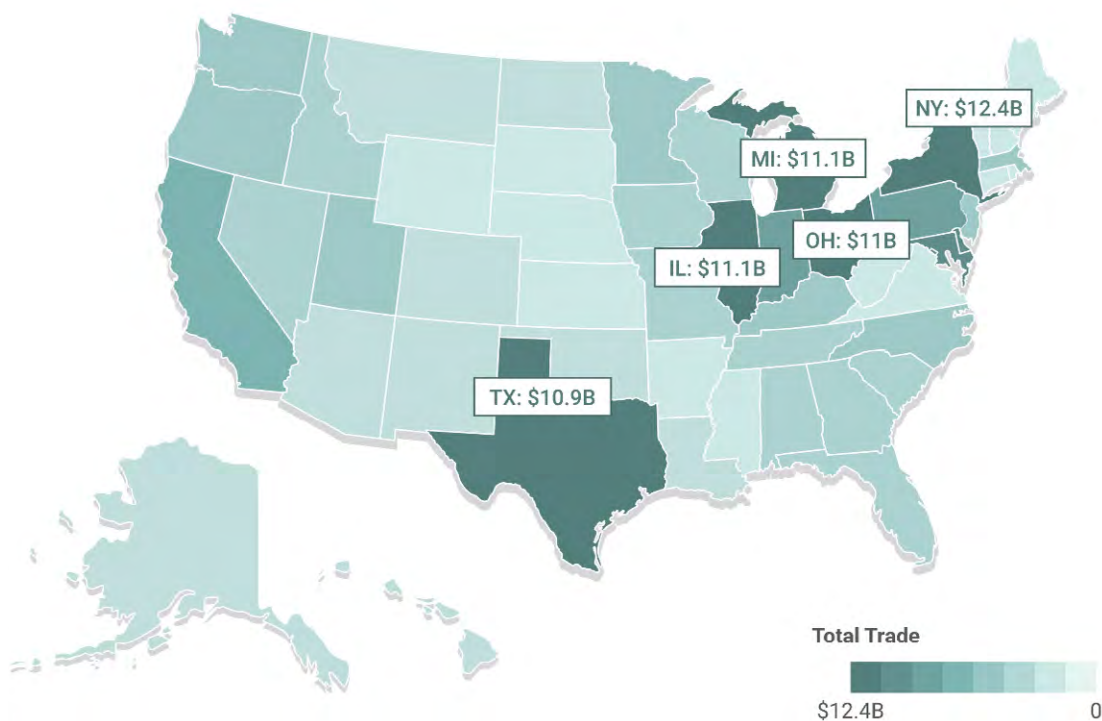


Figure 58: Value of Canadian Imports and Exports, by State

Canada’s exports to the United States are mostly in Stage 2 (\$26.7 billion, 33.7% of minerals and metals exports) and Stage 3 (\$23.1 billion, 29.1%). Canada’s imports from the United States are heavily concentrated in the most processed products, Stage 4 (\$25.9 billion, 44.9% of imports) as shown in Figure 59.

¹⁰⁷ Including trade in goods on a balance of payment basis: merchandise imports in 2024 were \$372 billion; exports were \$592 billion. Services imports were \$130 billion and exports were \$120 billion. Values from Statistics Canada [Table 12-10-0005-01](#) and [Table 36-10-0007-01](#).

¹⁰⁸ From the United States Census’s [Trade in Goods with France](#). In 2024 American exports to France were USD 43.5 billion; imports were USD 59.8 billion. This is about C\$141.5 billion at 2024 exchange rates.

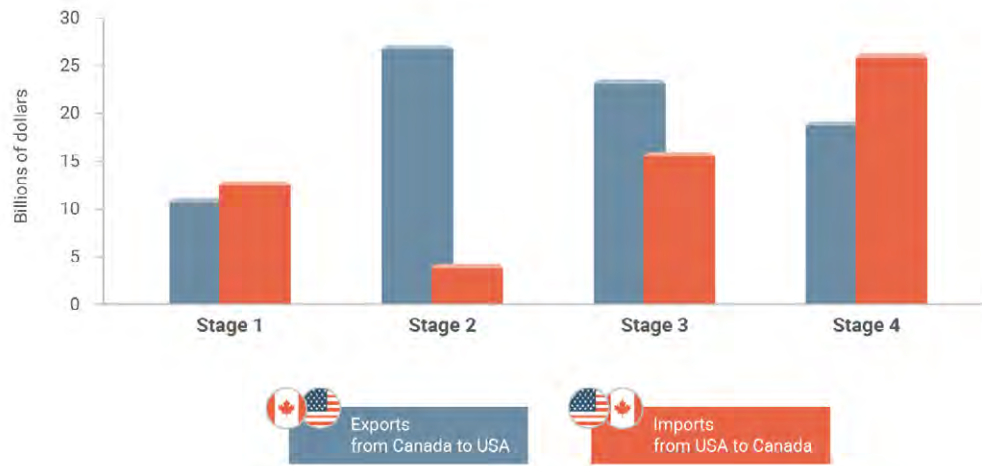


Figure 59: Imports and Exports, Canada-United States, By Stage

The leading exports from Canada to the United States in 2024 were iron and steel (\$18.6 billion), aluminum (\$15.8 billion) and gold (\$9.2 billion). The highest-value imports were iron and steel (\$15.8 billion), gold (\$6.7 billion) and aluminum (\$4.2 billion).

BALANCE OF TRADE

The balance of trade is Canada’s total exports minus its imports. Canada had a surplus (i.e., exports greater than imports) of \$34.7 billion in minerals and metals in 2024. Extraction (Stage 1) and primary manufacturing (Stage 2) both had surpluses, while Stage 3 and Stage 4 manufacturing showed trade deficits as shown in Figure 60.

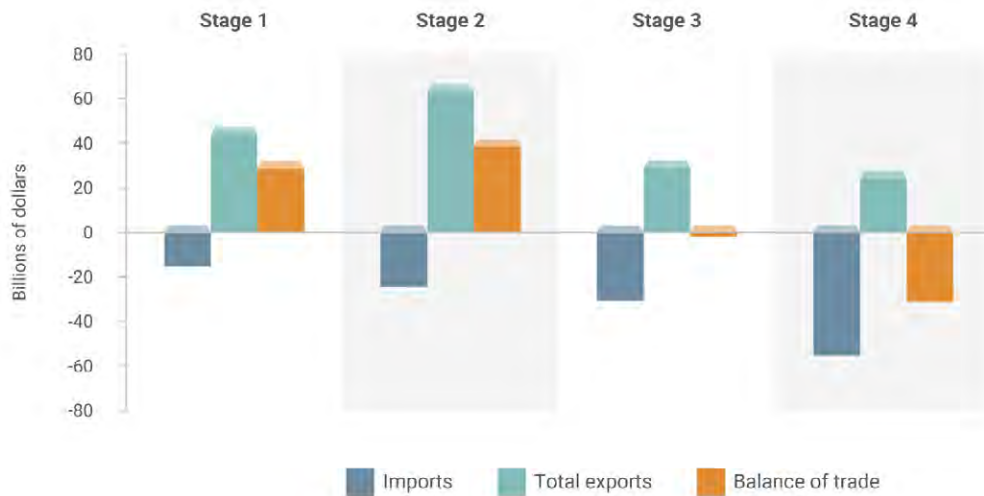


Figure 60: Balance of Trade by Stage, 2024¹⁰⁹

109 Trade data from Statistics Canada’s [Canadian International Merchandise Trade Web Application](#) using Natural Resources Canada’s categories for metals, nonmetals and coal and coke.

Canada maintained a trade surplus of \$26.4 billion with the United States in minerals and metals in 2024. Canada had a slight deficit (\$434 million) with the European Union and a deficit of \$5.4 billion with China. Canada’s balance of trade in minerals and metals with some of its largest trading partners is shown in Figure 61.

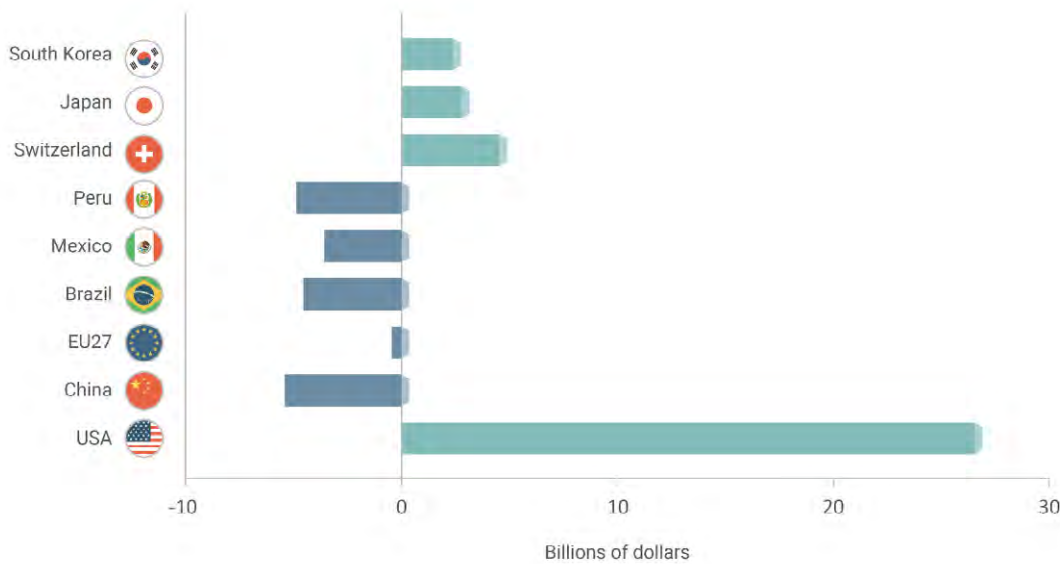


Figure 61: Balance of Trade, Select Partners, 2024¹¹⁰

CANADIAN MINING AROUND THE WORLD

In addition to assets in Canada, Canadian mining and exploration companies hold assets abroad. In 2023, 761 companies had mining assets outside of the country, with a total value of \$220.4 billion. This is almost double the value of Canadian mining assets in Canada, which was \$116.3 billion. Canadian mining assets abroad were held in 95 countries, as shown in Figure 62.

110 *Ibid.*

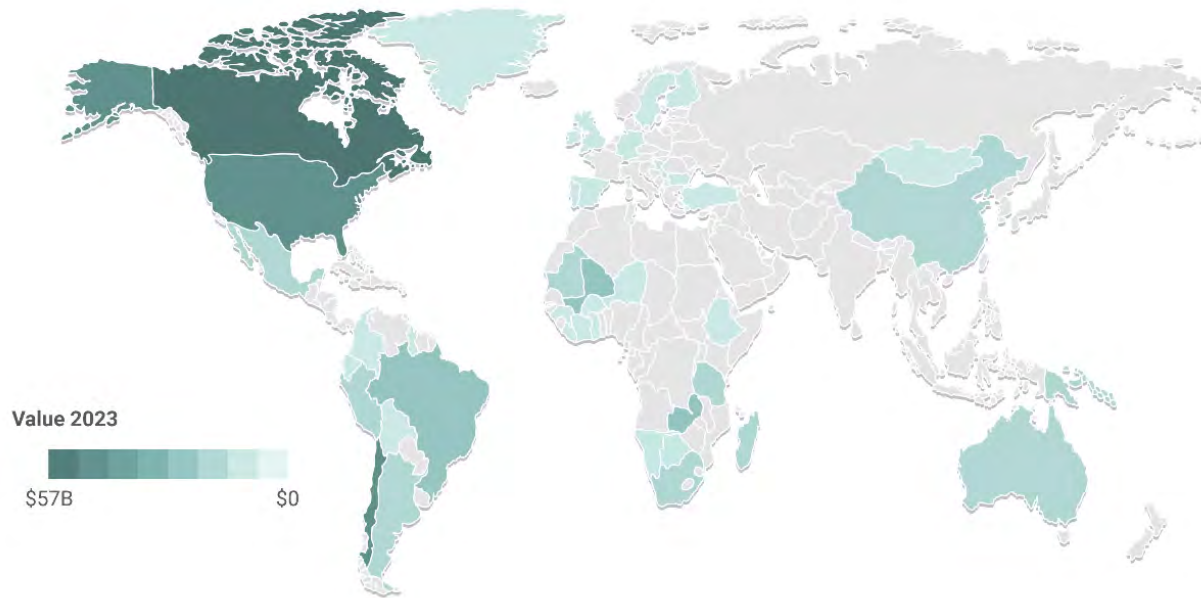


Figure 62: Value of Canadian Mining Assets by Country¹¹¹

In the decade from 2014, Canadian mining assets abroad increased in value by 30% from \$169.7 billion to \$220.4 billion in 2023. Over the same period, the value of Canadian mining assets in Canada increased 33% from \$87.2 billion in 2014 to \$116.3 billion in 2023.

The breakdown of junior and senior mining assets abroad by region is shown in Figure 63.

¹¹¹ From Natural Resources Canada's *Canadian Mining Assets Information Bulletin*, January 2024. <https://natural-resources.canada.ca/maps-tools-and-publications/publications/minerals-mining-publications/canadian-mining-assets/19323>. Note that this data describes "Canadian Mining Assets Abroad" which is slightly different from Canadian Direct Investment Abroad (CDIA) in the mining sector. CDIA is based on the international definition of foreign direct investment from national systems of accounts. Canadian Mining Assets Abroad are developed by Natural Resources Canada from financial accounting standards applied by Canadian public companies and auditors.

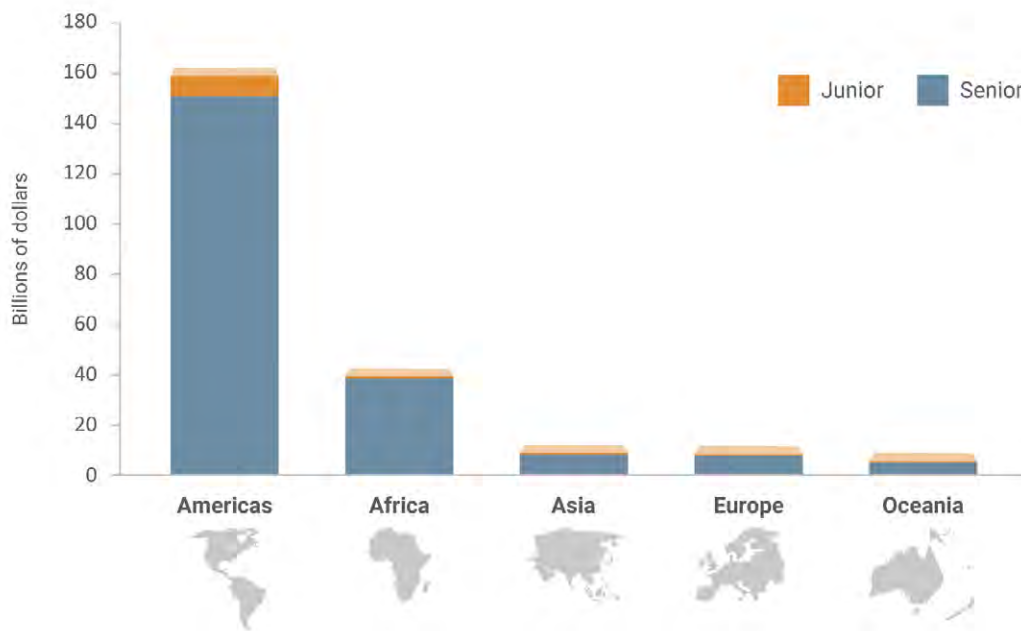


Figure 63: Junior and Senior Mining Assets Abroad, by Region

TRADE, DEFENCE AND CRITICAL MINERALS

The supply of critical minerals is increasingly important to defence and clean energy.

In 2025, the United States Interior Department published a list of 60 critical minerals “vital to the U.S. economy and national security that face potential risks from disrupted supply chains.”¹¹² In 2024, the European Union promulgated EU Regulation 2024/1252 that itemized 34 materials that “are considered to be critical due to their high economic importance and their exposure to high supply risk, often caused by a high concentration of supply from a few third countries.”¹¹³

Canada’s list of critical minerals was published in *The Canadian Critical Minerals Strategy*¹¹⁴ and updated in 2024. Canada’s list supports three priority value chains: advanced manufacturing, including defence; clean technologies; and information and communication technologies.

In 2024, the North Atlantic Treaty Organization (NATO) developed its own list of defence-critical raw materials essential for its defence industries. According to the alliance, “the availability and secure supply of these materials are vital to maintaining NATO’s technological edge and operational readiness. Disruptions in their supply could impact the production of essential defence equipment. Identifying these key materials is NATO’s first step towards building stronger, better protected supply chains, crucial for Allied defence and security.”¹¹⁵

112 United States Department of the Interior. November 7, 2025. [Interior Department releases final 2025 List of Critical Minerals.](#)

113 Official Journal of the European Union. May 3, 2024. [Regulation \(EU\) 2024/1252 of the European Parliament and of the Council.](#)

114 Natural Resources Canada. 2022. [The Canadian Critical Minerals Strategy.](#)

115 North Atlantic Treaty Organization. December 11, 2024. [NATO releases list of 12 defence-critical raw materials.](#)

The Hague Centre for Strategic Studies analyzed defence-industry raw materials requirements for Europe, with specific focus on geopolitical threats and supply chain risks. As part of their analyses, the Centre broke down the mineral and metal requirements of typical land, sea and air applications. Select elements of the analysis are repeated in Figure 64 below.


<p>Main battle tank</p> 	<p>hull, turret, tank floor binoculars smoothbore tank gun machine gun hull diesel engine PEM fuel cells electric motors</p>	<p>beryllium, tungsten, titanium, aluminum, iron/steel germanium, tantalum, tellurium, cadmium, copper graphite, manganese vanadium, molybdenum, chromium, nickel vanadium, tungsten, titanium, iron/steel niobium, iron/steel, barium platinum cobalt, manganese, samarium</p>
<p>Submarine</p> 	<p>seven-bladed skewback propeller batteries decks sonar periscope torpedoes body wings tail nose axis fan & compressors combustor turbine nozzle post-combustion</p>	<p>graphite, chromium lithium, silver, lead graphite graphite graphite, iron/steel lithium, silver, aluminum germanium, beryllium, graphite, tungsten, tantalum, molybdenum, tin, chromium, aluminum, nickel, cadmium, gold, lead graphite, titanium, aluminum graphite, titanium, aluminum graphite iron/steel rare earth elements, graphite, titanium, hafnium, samarium cobalt, aluminum, nickel rare earth elements, platinum, zirconium, aluminum, nickel graphite graphite</p>
<p>Aircraft</p> 	<p>drive shaft/propellers landing gear body wheels sensors and avionics communications and identification systems energy storage electro-optical systems all integrated wire network control systems magnets, radar, lasers, sensors canopy</p>	<p>graphite, manganese, samarium beryllium, vanadium, titanium, aluminum, iron/steel, copper graphite rare earth elements, germanium, borates, cobalt, graphite, indium, titanium, gallium, aluminum, tellurium, nickel, cadmium rare earth elements, beryllium, gallium, silver, copper lithium, barium rare earth elements, germanium, borates, beryllium, graphite, indium, tantalum, titanium, gallium, hafnium, aluminum, tellurium, selenium, zinc, cadmium, copper, thorium beryllium, aluminum, copper rare earth elements, aluminum, copper rare earth elements, aluminum, copper germanium</p>

Figure 64: Minerals in Defence Applications¹¹⁶

¹¹⁶ Girardi, Benedetta, Irina Patrauhau, Giovanni Cisco and Michel Rademaker. January 2023. [Strategic raw materials for defence: mapping European industry needs](#). Hague Centre for Strategic Studies.

Export licensing, tariffs and outright bans have created turbulence in critical minerals markets in recent years. In February 2025, for example, the Democratic Republic of the Congo banned cobalt exports to stem falling prices. The ban was extended until the fourth quarter of 2025 and followed by a quota system. Prices in the cobalt market doubled over the ban period, and have remained high.

In April 2025, the Chinese government expanded its list of critical minerals requiring an export licence. As export volumes fell, industries requiring permanent magnets struggled to obtain supply, and were forced to cut utilization rates or temporarily halt production.¹¹⁷ China implemented further export controls on lithium-ion battery supply chains in November 2025.

The United States has moved aggressively to secure supplies of critical minerals.

These government actions and their downstream effects have highlighted the extent of the world’s reliance on a small number of countries for key critical minerals.

This concentration of mining for key minerals is shown in Figure 65. For cobalt, nickel, graphite and magnet rare earth elements, the top producing country controls more than half of mine production.

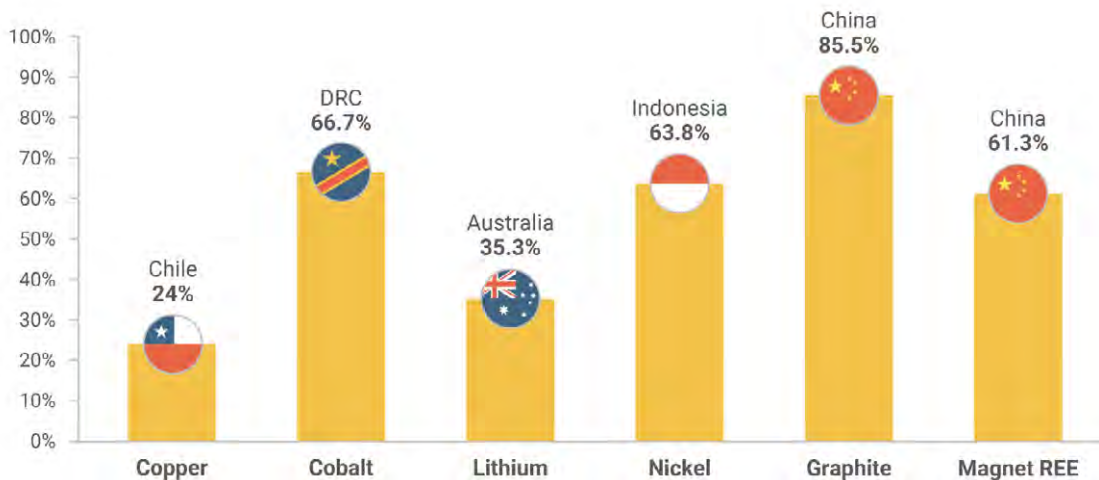


Figure 65: Top Producer as a Percentage of Total, Selected Minerals¹¹⁸

Refining capacity is even more concentrated. China refines a majority of the world’s cobalt, lithium, battery-grade graphite and magnet rare earth elements. It also refines 44% of the world’s copper, as shown in Figure 66.

¹¹⁷ Kim, Tae-Yoon, Shobhan Dhir, Amrita Dasgupta, and Alessio Scanziani. October 23, 2025. [With new export controls on critical minerals, supply concentration risks become reality.](#)

¹¹⁸ From the International Energy Agency’s [dataset](#) for the Global Critical Minerals Outlook 2025. Using information from the table Total Supply for Key Energy Transition Minerals, Base Case (kt).

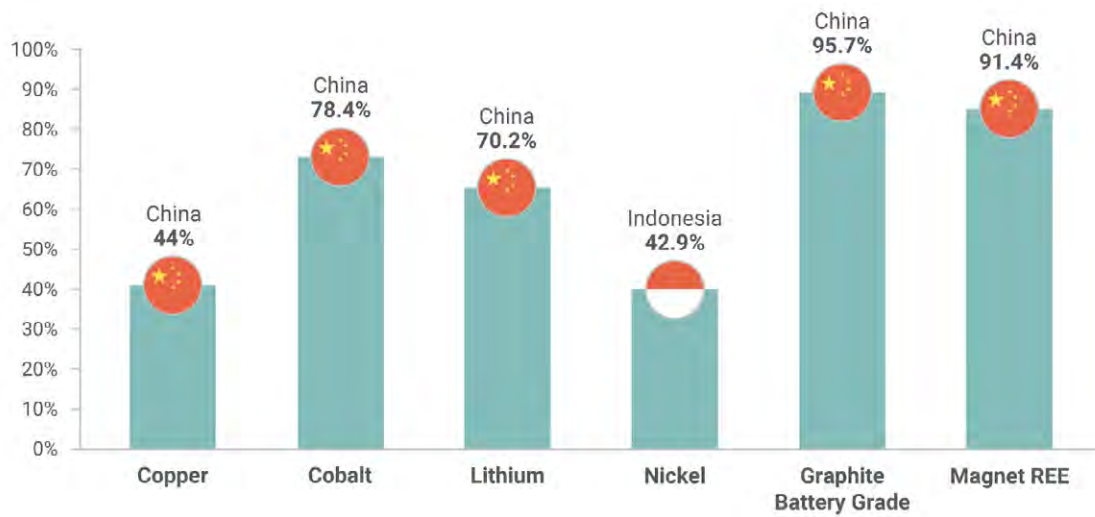


Figure 66: Top Refiner as a Percentage of Total, Selected Minerals¹¹⁹

The concentration of mining and refining capacity is often the result of lower costs for labour and capital, network effects, and less-stringent regulation. It can be difficult to build economically viable projects in other regions as a result: the IEA calculates that initial capital expenditures for mining and refining in regions outside the dominant player are on average 1.5 times higher than those within the top producing country.¹²⁰

Canada’s efforts to reduce global reliance on a few countries for certain critical minerals have had mixed results. As shown in Figure 67, production of several minerals has declined since 2019.

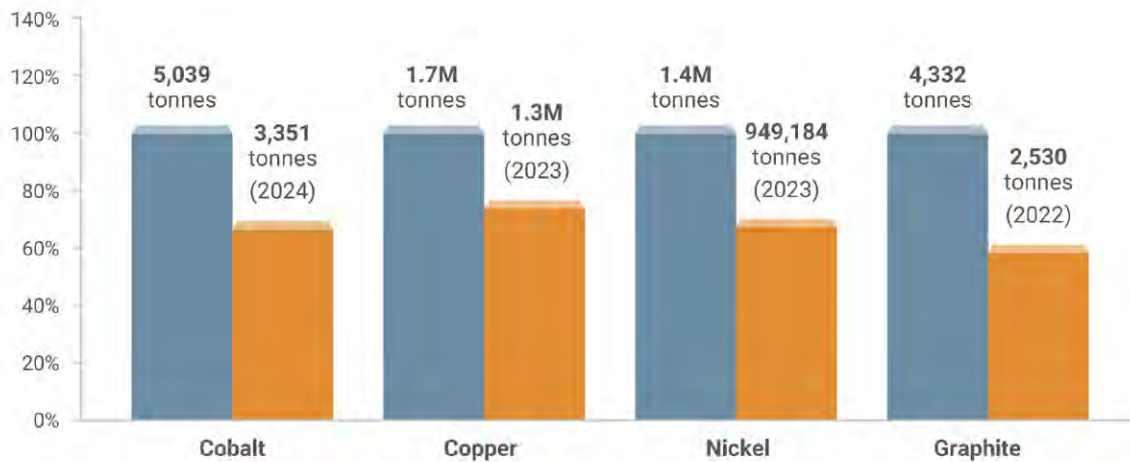


Figure 67: Change in Production from 2019 as Percent, Selected Critical Minerals¹²¹

119 *Ibid.*

120 International Energy Agency. 2025. *Global Critical Minerals Outlook 2025*.

121 Statistics Canada. Table 16-10-0022-01. Production, shipments and value of shipments of metallic and non-metallic minerals, annual. Copper and nickel values are for recoverable metal.

Production of Canadian lithium, on the other hand, has increased substantially, from zero in 2019 to 520 tonnes in 2023.

Canada does not produce rare earth elements commercially, but several advanced exploration projects are ongoing. According to Natural Resources Canada, some of the largest measured and indicated reserves of rare earth elements are in Canada. Reserves and resources are estimated at 15.2 million tonnes of rare earth oxide.¹²²

The United States's National Defense Authorization Act of 2023 and 2024 was supposed to reduce rare earth metals from China in weapons systems, with final elimination by 2027. The result was a pause in the production of F-35 fighters, and an eventual waiver for the use of magnets containing Chinese rare earths.¹²³

Canada also joined with the United States, the European Union and 11 other countries to create the Minerals Security Partnership (MSP). This partnership “aims to accelerate the development of diverse and sustainable critical energy minerals supply chains through working with host governments and industry to facilitate targeted financial and diplomatic support for strategic projects along the value chain.”¹²⁴

LOOKING FORWARD

The Mining Association of Canada is unique in terms of its engagement in international human rights and environment, sustainability and governance issues. *Towards Sustainable Mining* has been adopted by mining associations in Finland, Norway, Argentina, Australia, Botswana, the Philippines, Brazil, Norway, Mongolia, Colombia, Guatemala, Panama and Mexico. The Association contributes to multi-lateral initiatives and institutions including the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development and the Organization for Economic Cooperation and Development, among others.

Recent years have seen major changes in geopolitics and trade. More countries have become concerned about the sources of goods and services that are critical to their national security and economic success. Wars and sanctions have limited the movement of goods to and from some areas.

Because mining is a global industry, these changes are often felt more intensely, and as such, the opportunity for Canada to supply the world with responsibly mined minerals and metals has never been at greater. The Mining Association of Canada, its members, and Canadian governments must work together to ensure that minerals and metals remain a driver of Canada's success in international trade.

Critical Minerals

Canada retains strong fundamentals that can underpin global leadership in critical minerals. Its electricity grid is among the cleanest in the world, allowing Canadian refined metals to carry a significantly lower carbon footprint than many international competitors. High environmental, social and governance standards and the opportunity for Indigenous equity participation provide additional advantages that align with the procurement priorities of allied countries.

¹²² Natural Resources Canada. September 19, 2025. [Rare earth elements facts](#).

¹²³ Stockman, Farah. December 22, 2025. [How U.S. Defense Industry Dodged a Rare-Earth Shortage After China's Curbs](#).

¹²⁴ [Minerals Security Partnership](#).

These strengths can only translate into long-term market share if Canada accelerates mine approvals, builds trade-enabling infrastructure and provides competitive fiscal tools to attract private investment in both upstream and midstream projects. Without clear legislative action on pending tax measures and faster permitting, investors may shift capital to jurisdictions with more predictable timelines and stronger incentives.

The Government of Canada continues to advance its Critical Minerals Strategy to build value chains from exploration to advanced manufacturing. Resilient supply chains are central to both economic and national security objectives.

The recently announced Critical Minerals Production Alliance includes 26 investments and measures worth \$6.4 billion to advance critical mineral projects, including six located in Canada. The government also issued an Order in Council under the Defence Production Act to authorize stockpiling of critical minerals to strengthen supply chains and national security. Through its G7 Presidency and the direction set in Budget 2025, Canada is positioning the mining industry as a reliable supplier of responsibly produced minerals for clean energy, advanced manufacturing, and defence.

Funding programs, tax measures, and permitting processes must move at the speed of business if Canada is to compete effectively with other jurisdictions. Success will depend on close coordination between government departments and agencies. The government must operationalize the new funding tools, enact the legislative changes, and ensure alignment with Canada's industrial and defence strategies. Equally important will be stressing the importance of making development costs for brownfield mine expansion projects fully eligible under the CTM-ITC, given their ability to deliver near-term production.

Broadening support for earlier stages of the mining cycle is also important. Expanding the Canadian Exploration Expense to include technical studies, while maintaining access to flow-through incentives, will further de-risk early-stage exploration and support project advancement.

Trade in Critical Minerals

United States industries depend on secure supplies of copper, nickel, graphite and other key inputs. This stability presents an opportunity for Canada to expand critical mineral production and use the sector's growth to recalibrate parts of the economy that face tariffs or other trade frictions. Mining is already globally diversified in its trade outlook and is ideally positioned to strengthen Canada's economic resilience.

China maintains more than 90% of the world's magnet rare earth element refining capacity and more than 95% of its battery grade graphite refining capacity. Recent limits on Chinese exports have highlighted the need for independent supplies and processing of critical minerals.

Canada and its partners in the G7 recently launched the Critical Minerals Production Alliance which includes measures worth \$6.4 billion to advance critical mineral projects, including six in Canada. It is supported by the Roadmap to Promote Standards-Based Markets for Critical Minerals, a G7 initiative to align sustainability and traceability standards across allied countries.

The government also issued an Order in Council under the Defence Production Act to authorize stockpiling of critical minerals to strengthen supply chains and national security. Through its G7 Presidency and the direction set in Budget 2025, Canada is positioning the mining industry as a reliable supplier of responsibly produced minerals for clean energy, advanced manufacturing, and defence.

But Canada's refining, smelting and downstream processing capacity has eroded. Over the past decade at least four smelters have permanently closed or suspended operations, reducing domestic capacity and increasing reliance on imported feedstock. Many facilities have shifted from integrated operations to custom treatment of imported concentrates as local ore bodies declined, while rising power and transportation costs, aging infrastructure and the need for major environmental compliance investments have added pressure.

Direction to Export Development Canada to expand financing for mining and processing projects, and new support for Natural Resources Canada and Innovation, Science and Economic Development Canada will help accelerate investment and project development.

Industry and government share the same goal: to strengthen North American and allied supply chains and deliver lasting economic, environmental, and security benefits. Continued partnership will ensure that Canada turns recent policy momentum into real production, jobs, and long-term prosperity.

Defence

In early 2026, the Government of Canada released *Security, Sovereignty and Prosperity: Canada's Defence Industrial Strategy*.¹²⁵ The Strategy is a major shift in Canada's approach to defence procurement and industrial policy. It will be the framework for strengthening Canada's defence industrial base, sovereign capabilities, and secure supply chains in support of national defence and allied commitments.

By 2035, the Strategy is expected to drive approximately \$180 billion in defence procurement, \$290 billion in defence-related infrastructure, and more than \$125 billion in downstream economic activity, underscoring the scale of domestic industrial and supply-chain opportunities.

Under Pillar IV, the Strategy identifies securing essential raw materials, including steel, aluminum, and critical minerals, as a core objective of defence procurement. The new Defence Investment Agency is positioned to deliver these outcomes through procurement decisions. Procurement is identified as a key lever to support domestic sourcing where feasible, strengthen sovereignty, and reduce exposure to global supply-chain disruptions.

The Strategy's Build-Partner-Buy framework reinforces a preference for sourcing essential defence inputs from Canadian suppliers where feasible. More broadly, the Strategy signals a shift beyond extraction toward processing, reflecting the importance of midstream capacity to supply-chain security.

The Strategy commits the government to releasing a dedicated defence-critical minerals strategy by Q2 2026, which will address the expansion of production, processing, stockpiling, and procurement of minerals required for defence and security applications.

Mining and Development

Canada's investments abroad have a direct and positive economic impact on host countries. Direct and indirect effects support businesses and employees and provide taxes to governments, raising living standards and reducing poverty.

Foreign Direct Investment by Canadians also benefits Canada. Canada's role as a global mining leader is solidified by foreign investment: Canadian capital, expertise, and technology are employed around the world where they are most useful.

125 Department of National Defence. 2026. [Security, Sovereignty and Prosperity: Canada's Defence Industrial Strategy](#).

Canada continues to exert significant global leadership in responsible mining, principally through the Mining Association of Canada's Towards Sustainable Mining (TSM) initiative, and the ongoing effort to consolidate existing international mining standards into one standard and multi-stakeholder oversight system through the Consolidated Standard Mining Initiative, which is heavily influenced by the architecture and content of TSM.

Global Affairs Canada has indicated that it will return to a public-private partnership model to deliver international development projects. This approach was previously effective in accelerating projects that delivered benefits to Canadian mining company host-communities, including in the areas of community energy, agriculture, and boosted the economic participation of women.

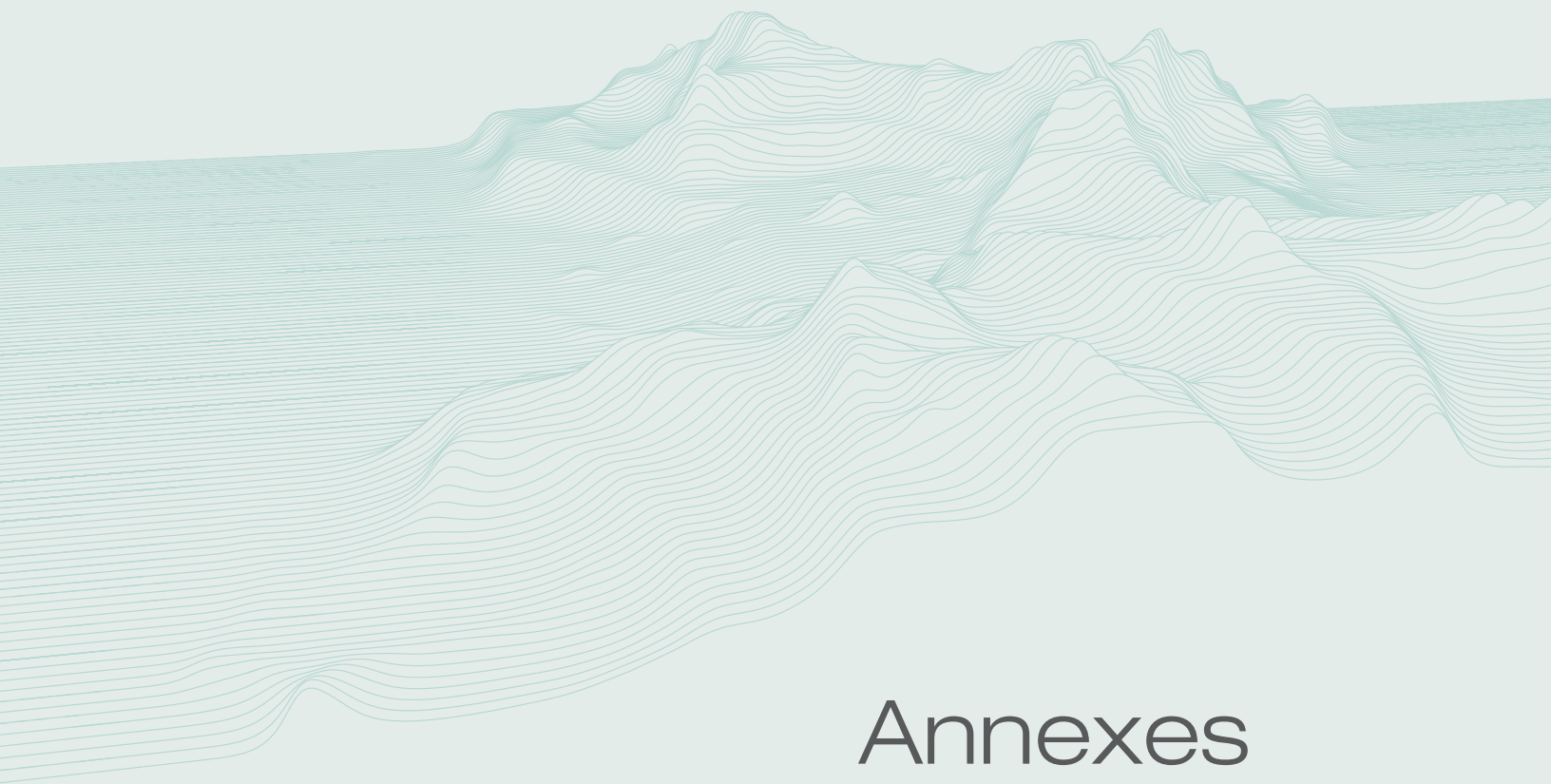
Government Oversight of Mining Companies Abroad

Canada has one of the strongest and most comprehensive approaches for ensuring its companies operate responsibly outside of its borders. Legislative requirements such as the *Corruption of Foreign Public Officials Act*, the *Extractive Sector Transparency Measures Act*, and the recently implemented *Fighting Against Forced Labour and Child Labour in Supply Chains Act* place clear legislative requirements on Canadian businesses. Global Affairs Canada's strategy for Responsible Business Conduct Abroad articulates further expectations for Canadian companies.

In accordance with its responsibilities as a member of the Organization for Economic Cooperation and Development (OECD), Canada has established a National Contact Point for Responsible Business Conduct (NCP). The NCP promotes awareness of the OECD's guidelines for running a multinational business responsibly and helps to resolve disputes where the guidelines are not followed.

Appointed in April 2019 with a 5-year mandate, the Canadian Ombudsperson for Responsible Enterprise (CORE) was established to review complaints about possible human rights abuses by Canadian companies specifically in the garment, mining, and oil and gas sectors. Uniquely in the world, the office had the power to recommend penalties for a Canadian company operating abroad if they refuse to participate in dispute resolution mechanisms in good faith when complaints are brought forward. Penalties include the loss of diplomatic and trade commissioner support and removal of Export Development Canada financing. When the mandate expired in 2024, the government appointed an interim-CORE for a 12-month term and initiated a review of the mandate. As of the end of 2025, the CORE position is currently vacant and the results of the review have not been published.

The Mining Association of Canada supports an effective federal government dispute resolution mechanism for countries abroad. CORE should be combined with the NCP which, unlike the CORE mandate, applies to all Canadian companies operating abroad. Respecting human rights abroad is the responsibility of companies in all sectors.



Annexes

ANNEX 1: PRODUCING MINES IN CANADA, 2024

COMPANY	MINE SITE	ACTIVITY TYPE	LOCATION	COMMODITY
Newfoundland & Labrador				
Vale Newfoundland and Labrador Limited	Voisey's Bay	(P, U., C.)	Voisey's Bay	BM
Tacora Resources Inc.	Scully	(P, C.)	Wabush	Iron ore
Iron Ore Company of Canada Inc.	Carol Lake	(P, C.)	Labrador City	Iron ore
Tata Steel Minerals Canada Limited	DSO (3 and 4)	(P)	Menihek	Iron ore
Trinity Performance Minerals	Conception Bay South	(P)	Conception Bay South	IM
Nova Scotia				
Nova Construction Ltd.	Brierly Brook	(P)	Antigonish	IM
Lafarge Canada Inc.	Brookfield	(P, Plant)	Brookfield	IM
National Gypsum (Canada) Ltd.	East Milford	(P)	Milford	IM
K+S Windsor Salt Ltd.	Pugwash	(U.)	Pugwash	IM
Compass Minerals Canada Corporation	Amherst (Nappan)	(Solution mining)	Amherst	IM
New Brunswick				
Hammond River Holdings Ltd.	Glenvale	(P)	Three Rivers	IM
Graymont Inc.	Havelock (Hicksville, Samp Hill, Springhill)	(P, Plant)	Havelock	IM
Nutrien Ltd.	Picadilly	(U.)	Sussex	IM
Hammond River Holdings Ltd.	Upham East	(P)	Upham	IM
Brookville Manufacturing Company	Brookville	(P, Plant)	Saint John	IM
Elmtree Resources Ltd.	Sormany	(P, Plant)	Sormany	IM
Quebec				
Rio Tinto Group	Lac Tio	(P)	Havre-Saint-Pierre	OM
Champion Iron Ltd.	Bloom Lake	(P, C.)	Fermont	Iron ore
ArcelorMittal	Mont-Wright	(P, C.)	Fermont	Iron ore
Tata Steel Minerals Canada Limited	DSO (Goodwood)	(P)	Schefferville	Iron ore
ArcelorMittal	Fire Lake	(P)	Fermont	Iron ore
Magris Performance Materials Inc.	Niobec	(U., C.)	Saint-Honoré-de-Chicoutimi	OM
Glencore Canada Corporation	Raglan	(U., C.)	Katinniq	BM
Canadian Royalties Inc.	Nunavik Nickel	(P, U., C.)	Kangiqsujuaq	BM
Newmont Corporation	Éléonore	(U., C.)	Opinaca Reservoir	PM
Eldorado Gold	Lamaque	(U., C.)	Val-d'Or	PM
Sayona Québec Inc.	North American Lithium	(P, C.)	La Corne	OM
Agnico Eagle Mines Limited	Goldex	(U., C.)	Val-d'Or	PM
Wesdome Gold Mines Ltd.	Kiena	(U., C.)	Val-d'Or	PM
Agnico Eagle Mines Limited	Canadian Malartic	(P, U., C.)	Malartic	PM
Agnico Eagle Mines Limited	LaRonde	(U., C.)	Preissac	PM
IAMGOLD Corporation	Westwood-Doyon	(U., C.)	Cadillac	PM
Hecla Mining Company	Casa Berardi	(P, U., C.)	north of La Sarre, Casa Berardi Twp.	PM
Stone Canyon Industries Holding	Seleine	(U.)	Îles-de-la-Madeleine	IM

COMPANY	MINE SITE	ACTIVITY TYPE	LOCATION	COMMODITY
St Marys Cement	McInnis	(P, Plant)	Port-Daniel–Gascons	IM
Les Tourbières Berger Ltée.	Saint-Modeste	(P)	Saint-Modeste	IM
Ciment Québec inc.	Quebec	(P, Plant)	City of Québec	IM
Graymont Inc.	Marbleton	(P, Plant)	Marbleton	IM
Ciment Québec inc.	Saint-Basile	(P, Plant)	Saint-Basile	IM
Graymont Inc.	Les Carrières Calco	(P, Plant)	St-Marc-des-Carrières	IM
Carrière d'Acton Vale Ltée	Acton Vale	(P, Plant)	Acton Vale	IM
Graymont Inc.	Bedford	(P, Plant)	Bedford	IM
OMYA (Canada) Inc.	Saint-Armand	(P, Plant)	Saint-Armand	IM
Béton Provincial	Joliette	(P, Plant)	Joliette	IM
Lafarge Canada Inc.	St-Constant	(P, Plant)	St-Constant	IM
Demix Agrégats	Laval	(P, Plant)	Laval	IM
Ciment Québec inc.	Laval	(P, Plant)	Laval	IM
Northern Graphite Corporation	Lac-des-Îles	(P, Plant)	Saint-Aimé-du-Lac-des-Îles	IM
Ontario				
Agnico Eagle Mines Limited	Detour Lake	(P, C.)	Northeast of Cochrane	PM
Agnico Eagle Mines Limited	Macassa	(U., C.)	Kirkland Lake area	PM
McEwen Mining Inc.	Fox Complex	(P, U., C.)	Matheson	PM
Alamos Gold Inc.	Young-Davidson	(U., C.)	Matachewan	PM
Glencore Canada Corporation	Nickel Rim South	(U.)	Sudbury	BM
Vale Canada Limited	Garson	(U.)	Sudbury	BM
Vale Canada Limited	Clarabelle	(C.)	Sudbury	BM
Vale Canada Limited	Copper Cliff Complex	(U.)	Sudbury	BM
Newmont Corporation	Hoyle Pond	(U.)	South of Porcupine	PM
Pan American Silver Corp.	Bell Creek	(U., C.)	Timmins	PM
Vale Canada Limited	Creighton	(U.)	Sudbury	BM
Newmont Corporation	Porcupine	(C.)	Timmins	PM
Newmont Corporation	Hollinger	(P)	Timmins	PM
Vale Canada Limited	Coleman	(U.)	Sudbury	BM
Glencore Canada Corporation	Fraser	(U.)	Sudbury	BM
Glencore Canada Corporation	Strathcona	(C.)	Sudbury	BM
Glencore Canada Corporation	Kidd Creek	(U., C.)	Timmins	BM
KGHM International Ltd.	McCreedy West	(U.)	Sudbury	BM, PM
Vale Canada Limited	Totten	(U.)	Worthington	BM
Pan American Silver Corp.	Timmins West	(U.)	Timmins	PM
IAMGOLD Corporation	Côté Gold	(P)	Gogama	PM
Newmont Corporation	Borden	(P, U.)	Chapleau	PM
Alamos Gold Inc.	Island	(U., C.)	Dubreuilville	PM
Alamos Gold Inc.	Magino	(P, C.)	Timmins	PM
Wesdome Gold Mines Ltd.	Eagle River	(U., C.)	Wawa	PM
Barrick Gold Corporation	Hemlo (Williams)	(P, U., C.)	Marathon	PM
Impala Canada Ltd.	Lac des Iles	(P, U., C.)	Thunder Bay	PM

COMPANY	MINE SITE	ACTIVITY TYPE	LOCATION	COMMODITY
Newmont Corporation	Musselwhite	(U., C.)	North of Pickle Lake	PM
Evolution Mining Ltd.	Red Lake	(U., C.)	Balmertown	PM
New Gold Inc.	Rainy River	(P., U., C.)	Fort Frances	PM
Canadian Wollastonite	St. Lawrence	(P.)	Kingston	IM
OMYA (Canada) Inc.	Tatlock	(P.)	Tatlock	IM
Lafarge Canada Inc.	Bath	(P.)	Bath	IM
Heidelberg Materials	Picton	(P.)	Picton	IM
CRH Canada Group Inc.	Ogden Point	(P.)	Ogden Point	IM
Covia Canada Ltd.	Blue Mountain	(P., Plant)	Blue Mountain	IM
St Marys CBM (Canada) Inc.	Bowmanville	(P.)	Bowmanville	IM
Carmeuse Lime (Canada) Limited	Dundas	(P.)	Dundas	IM
Lafarge Canada Inc.	Dundas	(P.)	Dundas	IM
CGC Inc.	Hagersville	(U., Plant)	Hagersville	IM
Carmeuse Lime (Canada) Limited	Beachville	(P., Plant)	Ingersoll	IM
E.C. King Contracting Ltd. (Miller Paving Co.)	Sydenham	(P.)	Owen Sound	IM
Owen Sound Ledgerock Ltd.	Owen Sound	(P.)	Owen Sound	IM
St Marys CBM (Canada) Inc.	St Marys	(P.)	St. Marys	IM
Boreal Agrominerals Inc.	Spanish River Carbonite	(P.)	Northwest of Sudbury	IM
Compass Minerals Canada Corporation	Goderich	(U., Plant)	Goderich	IM
Compass Minerals Canada Corporation	Goderich	(Solution mining)	Goderich	IM
Magris Talc Canada Inc.	Penhorwood	(P.)	Penhorwood	IM
Carmeuse Lime (Canada) Limited	Northern Operation	(P.)	Blind River	IM
K+S Windsor Salt Ltd.	Windsor	(Solution mining)	Windsor	IM
K+S Windsor Salt Ltd.	Ojibway	(U.)	Windsor	IM
Lafarge Canada Inc.	Meldrum Bay	(P., Plant)	Manitoulin Island	IM
Equinox Gold	Greenstone	(P.)	Geraldton	PM
Manitoba				
Sinomine Resource Grp Co. Ltd.	Tanco	(U., C., Plant)	Lac-du-Bonnet	BM
Vale Canada Limited	Thompson (T-1 and T-3)	(P., U., C.)	Thompson	BM
Hudbay Minerals Inc.	Stall Lake	(C.)	Snow Lake	BM, PM
Hudbay Minerals Inc.	New Britannia	(C.)	Snow Lake	BM, PM
Hudbay Minerals Inc.	Lalor Lake	(U.)	Snow Lake	BM, PM
Graymont Inc.	Faulkner	(P., Plant)	Faulkner	IM
Heidelberg Materials	Amaranth	(P., Plant)	Alonsa	IM
ERCO Worldwide	Hargrave	(U., Plant)	Viriden	IM
Saskatchewan				
SSR Mining Inc.	Santoy	(U.)	Santoy Lake	PM
SSR Mining Inc.	Seabee	(C.)	Laonil Lake	PM
Orano Canada Inc.	McClellan Lake	(C.)	McClellan Lake	Uranium
Cameco Corporation	Cigar Lake	(U.)	Waterbury Lake	Uranium

COMPANY	MINE SITE	ACTIVITY TYPE	LOCATION	COMMODITY
Cameco Corporation	McArthur River	(U.)	North of Key Lake	Uranium
Cameco Corporation	Key Lake	(C.)	North of Highrock Lake	Uranium
Nutrien Ltd.	Rocanville	(U., Plant)	Rocanville	IM
The Mosaic Company	Esterhazy (K-3)	(U., Plant)	Esterhazy	IM
Compass Minerals Canada Corporation	Wynyard (Big Quill)	(Plant)	Wynyard	IM
The Mosaic Company	Belle Plaine	(Solution mining, Plant)	Belle Plaine	IM
Nutrien Ltd.	Lanigan	(U.)	Lanigan	IM
K+S Potash Canada	Bethune	(Solution mining, Plant)	Bethune	IM
Nutrien Ltd.	Allan	(U., Plant)	Allan	IM
Nutrien Ltd.	Patience Lake	(U., Plant)	Blucher	IM
ERCO Worldwide	Saskatoon facility	(Solution mining, Plant)	Saskatoon	IM
Saskatchewan Mining and Minerals Inc.	Chaplin Lake	(P., Plant)	Chaplin	IM
Nutrien Ltd.	Cory	(U., Plant)	Cory	IM
Nutrien Ltd.	Vanscoy	(U., Plant)	Vanscoy	IM
Compass Minerals Canada Corporation	Unity	(Solution mining)	Unity	IM
Westmoreland Coal Company	Estevan	(P.)	Bienfait	Coal
Westmoreland Coal Company	Poplar River	(P.)	Coronach	Coal
Alberta				
BURNCO Rock Products Ltd.	Hammerstone Quarry	(P.)	North of Fort McMurray	IM
Suncor Energy Inc.	Fort McMurray West	(P.)	Fort McMurray	IM
Ward Chemical	Calling Lake	(Solution mining)	Calling Lake	IM
Tiger Calcium Services Inc.	Mitsue	(Solution mining)	Slave Lake	IM
Graymont Inc.	Exshaw (Gap)	(P., Plant)	Exshaw	IM
Lafarge Canada Inc.	Exshaw	(P., Plant)	Exshaw	IM
BURNCO Rock Products Ltd.	Clearwater	(P., Plant)	Clearwater River	IM
Lehigh Hanson	Mcleod	(P.)	Cadomin	IM
Westmoreland Coal Company	Genesee	(P.)	Genesee	Coal
Westmoreland Coal Company	Coal Valley	(P.)	Edson	Coal
Coalspur Mines Limited	Vista	(P.)	Hinton	Coal
CST Canada Coal Limited	Grande Cache	(P., U.)	Grande Cache	Coal
Imperial Oil Ltd.	Kearl	(P.)	Fort McMurray	Oil
Suncor Energy Inc.	Millennium and Steep-bank	(P.)	Fort McMurray	Oil
Canadian Natural Resources Limited	Jackpine	(P.)	Fort MacKay	Oil
Syncrude Canada Ltd.	Aurora North and South	(P.)	Fort MacKay	Oil
Syncrude Canada Ltd.	Mildred Lake	(P.)	Fort MacKay	Oil
Canadian Natural Resources Limited	Muskeg River	(P.)	Fort MacKay	Oil
Suncor Energy Inc.	Fort Hills	(P.)	Fort MacKay	Oil
Canadian Natural Resources Limited	Horizon	(P.)	Fort MacKay	Oil

COMPANY	MINE SITE	ACTIVITY TYPE	LOCATION	COMMODITY
British Columbia				
Gold Mountain Mining Corp.	Elk	(P.)	Peachland	PM
New Gold Inc.	New Afton	(U., C.)	Kamloops	BM, PM
Hudbay Minerals Inc.	Copper Mountain	(P., C.)	Princeton	BM
Teck Resources Limited	Highland Valley	(P., C.)	Logan Lake	BM
Imperial Metals Corporation	Mount Polley	(P., C.)	northeast of Williams Lake	BM
Taseko Mines Limited	Gibraltar	(P., C.)	north of Williams Lake	BM
Centerra Gold Inc.	Mount Milligan	(P., C.)	Fort St. James	BM, PM
Newmont Corporation	Red Chris	(P., C.)	Kinaskan Lake	BM
Newmont Corporation	Brucejack	(U., C.)	Stewart	PM
Baymag Inc.	Mount Brussilof	(P.)	Mount Brussilof	IM
CertainTeed Gypsum Canada, Inc.	Kootenay West	(P.)	Canal Flats	IM
Lafarge Canada Inc.	Falkland	(P., Plant)	Falkland	IM
Progressive Planet Solutions Inc.	Bud	(P.)	Princeton	IM
Progressive Planet Solutions Inc.	Red Lake	(P.)	Kamloops	IM
Imperial Limestone Co. Ltd.	Imperial Limestone	(P.)	Texada Island	IM
Texada Quarrying Ltd. (Lafarge Canada Inc.)	Texada	(P.)	Texada Island	IM
Fireside Minerals Ltd.	Fireside	(P.)	Fireside	IM
Glencore Canada Corporation	Line Creek	(P.)	Sparwood	Coal
Glencore Canada Corporation	Elkview	(P.)	Sparwood	Coal
Glencore Canada Corporation	Fording River	(P.)	Elkford	Coal
Glencore Canada Corporation	Greenhills	(P.)	Sparwood	Coal
Conuma Coal Resources Ltd.	Quintette	(P.)	Tumbler Ridge	Coal
Conuma Coal Resources Ltd.	Wolverine	(P., Plant)	Tumbler Ridge	Coal
Conuma Coal Resources Ltd.	Brule	(P.)	Tumbler Ridge	Coal
Conuma Coal Resources Ltd.	Willow Creek	(P.)	Chetwynd	Coal
Yukon				
Hecla Mining Company	Keno Hill Silver District	(U., C.)	Mayo	PM, BM
Victoria Gold Corporation	Eagle (Dublin Gulch)	(P., C.)	Mayo	PM
Northwest Territories				
De Beers Canada Inc.	Gahcho Kué	(P., Plant)	Lac de Gras	DIAM
Rio Tinto Group	Diavik	(U., Plant)	Lac de Gras	DIAM
Burgundy Diamond Mines	Ekati	(U., Plant)	Lac de Gras	DIAM
Nunavut				
Baffinland Iron Mines Corporation	Mary River	(P.)	Pond Inlet	Iron ore
Agnico Eagle Mines Limited	Meliadine	(P., U., C.)	Rankin Inlet	PM
Agnico Eagle Mines Limited	Meadowbank	(C.)	Baker Lake	PM
Agnico Eagle Mines Limited	Amaruq	(P., U.)	Baker Lake	PM

Source: Natural Resources Canada.

(P.) Open-Pit, (U.) Underground, (C.) Concentrator

Notes: Excluded operations are clay products, peat, and most construction materials (most stone, sand and gravel). Included are operations that produced during 2024.

ANNEX 2: CANADIAN PRODUCTION OF LEADING MINERALS BY PROVINCE AND TERRITORY, 2024 (p)

	GOLD		COAL		IRON ORE (2)	
	kilograms	\$000	kilotonnes	\$000	kilotonnes	\$000
Newfoundland	-	-			x	x
Prince Edward Island	..	..			..	..
Nova Scotia	258	22,966	x	x	-	-
New Brunswick	..	..			..	..
Quebec	55,232	4,690,442			25,677	3,052,562
Ontario	77,757	7,032,747			-	-
Manitoba	x	x			-	-
Saskatchewan	x	x	x	x	-	-
Alberta	9	586	x	x	-	-
British Columbia	19,177	1,623,245	x	x	-	-
Yukon	5,893	x			-	-
Northwest Territories	..	..			..	..
Nunavut	x	x			x	x
Canada	198,899	16,889,604	42,544	9,663,101	43,642	5,580,895

	POTASH (MOP)		COPPER		URANIUM	
	kilotonnes	\$000	tonnes	\$000	tonnes	\$000
Newfoundland	-	-	12,947	x		
Prince Edward Island	-	-	..	..	..	..
Nova Scotia	-	-	-	-	-	-
New Brunswick	-	-	..	..	..	..
Quebec	-	-	x	x	-	-
Ontario	-	-	214,663	1,575,555	-	-
Manitoba	-	-	x	x	13,479	3,136,915
Saskatchewan	25,463	8,678,019	-	-	-	-
Alberta	-	-	-	-	-	-
British Columbia	-	-	274,249	2,454,680	-	-
Yukon	..	..	-	-	-	-
Northwest Territories	-	-	..	..	..	..
Nunavut	..	..	-	-	-	-
Canada	25,463	8,678,019	534,610	4,504,092	13,479	3,136,915

	SAND AND GRAVEL (1)		STONE	
	tonnes	\$000	tonnes	\$000
Newfoundland	953,603	x	1,661,877	x
Prince Edward Island	x	x	x	x
Nova Scotia	5,679,933	x	7,015,591	x
New Brunswick	3,910,384	x	5,436,084	61,382
Quebec	11,031,341	x	24,568,797	x
Ontario	104,758,279	85,528	59,233,843	794,766
Manitoba	10,102,184	x	4,841,324	x
Saskatchewan	6,409,350	76,472	x	x
Alberta	44,730,153	649,107	5,145,528	x
British Columbia	55,022,308	618,470	10,012,528	181,293
Yukon	197,616	2,489	-	-
Northwest Territories	x	x	x	x
Nunavut	x	x	-	-
Canada	242,833,737	2,618,803	118,109,520	1,507,205

	DIAMONDS		NICKEL	
	000 carats	\$000	tonnes	\$000
Newfoundland	-	-	17,177	x
Prince Edward Island	-	-	..	..
Nova Scotia	-	-	-	-
New Brunswick	-	-	-	-
Quebec	18,666	1,949	46,175	977,254
Ontario	-	-	50,003	1,041,197
Manitoba	-	-	11,642	x
Saskatchewan	-	-	-	-
Alberta	-	-	-	-
British Columbia	-	-	-	-
Yukon	-	-	-	-
Northwest Territories	13,926	1,470,594	..	..
Nunavut	-	-	-	-
Canada	13,945	1,472,543	124,996	2,760,094

Sources: Natural Resources Canada; Statistics Canada.

Notes:

(1) For metals, the quantity refers to the recoverable metal in concentrates shipped.

(1) Mineral production of sand and gravel for Nunavut is included in totals for the Northwest Territories.

(2) The quantity and value reflect iron ore concentrates only because agglomerates values are suppressed by the source.

ANNEX 3: CANADA'S WORLD ROLE AS A PRODUCER OF CERTAIN IMPORTANT MINERALS, 2024 (p)

			Rank of Five Leading Countries				
		World	1	2	3	4	5
			Canada	Russia	Belarus	China	Germany
Potash (K ₂ O equivalent) (mine production)	000 t	48,000	15,000	9,000	7,000	6,300	3,000
	% of world total		31.3	18.8	14.6	13.1	6.3
			Brazil	Canada	DR Congo	Russia	Rwanda
Niobium (mine production)	t	110,000	100,000	7,100	700	350	200
	% of world total		90.9	6.5	0.6	0.3	0.2
			Finland	Canada	Latvia	Belarus	Sweden
Peat	000 t	20,000	3,300	3,000	2,400	2,200	2,000
	% of world total		16.5	15.0	12.0	11.0	10.0
			Kazakhstan	Canada	Namibia	Australia	Uzbekistan
Uranium (metal content) ¹ (mine production)	t	54,345	21,112	10,986	6,985	4,658	4,000
	% of world total		38.8	20.2	12.9	8.6	7.4
			China	Republic of Korea	Canada/Japan		Mexico
Cadmium (metal)	t	24,000	9,300	4,500	1,700		1,200
	% of world total		38.8	18.8	7.1		5.0
			Russia	South Africa	Canada/Zimbabwe		United States
Palladium (metal content)	kg	190,000	75,000	72,000	15,000		8,000
	% of world total		39.5	37.9	7.9		4.2
			China	India	Russia	Canada	UAE
Aluminum (primary metal)	000 t	72,000	43,000	4,200	3,800	3,300	2,700
	% of world total		59.7	5.8	5.3	4.6	3.8
			DR Congo	Indonesia	Russia	Canada	Philippines
Cobalt (mine production)	t	290,000	220,000	28,000	8,700	4,500	3,800
	% of world total		75.9	9.7	3.0	1.6	1.3
			Russia	Botswana	Angola	Canada	DR Congo
Diamonds (precious)	000 carats	107,903	37,323	18,125	14,027	13,322	9,788
	% of world total		34.6	16.8	13.0	12.3	9.1
			China	Russia	Australia	Canada	United States
Gold (mine production)	t	3,300	380	310	290	200	160
	% of world total		11.5	9.4	8.8	6.1	4.8
			China	Republic of Korea	Japan	Canada	France
Indium	t	1,080	760	180	60	35	21
	% of world total		70.4	16.7	5.6	3.2	1.9
			Indonesia	Philippines	Russia	Canada	China
Nickel (mine production)	t	3,700,000	2,200,000	330,000	210,000	190,000	120,000
	% of world total		59.5	8.9	5.7	5.1	3.2

		Rank of Five Leading Countries						
		World	1	2	3	4	5	
			South Africa	Zimbabwe	Russia	Canada	United States	
Platinum (metal content)	kg	170,000	120,000	19,000	18,000	5,200	2,000	
	% of world total		70.6	11.2	10.6	3.1	1.2	
			China	India	Mexico	Canada	Finland	
Wollastonite (mine production)	t	1,100,000	800,000	120,000	95,000	20,000	10,000	
	% of world total		72.7	10.9	8.6	1.8	0.9	
			United States	Qatar	Russia	Algeria	Canada	
Helium	M m3 of contained	180	81	64	17	11	6	
	% of world total		45.0	35.6	9.4	6.1	3.3	
			China	Japan/Russia		Sweden	Canada	
Tellurium	t	980	750	70		46	27	
	% of world total		76.5	7.1		4.7	2.8	
			Madagascar	China	Finland	United States	India	Canada is 6th
Mica (natural) (scrap and flake)	t	380,000	85,000	80,000	50,000	23,000	13,000	12,000
	% of world total		22.4	21.1	13.2	6.1	3.4	3.2
			China	Mozambique	South Africa	Australia	Norway	Canada is 6th
Titanium concentrate (Ilmenite)	000 t	9,400	3,300	1,908	1,400	600	360	350
	% of world total		35.1	20.3	14.9	6.4	3.8	3.7
			China	United States	India	Germany	Australia	Canada is 6th
Salt (mine production)	000 t	280,000	55,000	40,000	28,000	16,000	13,000	12,000
	% of world total		19.6	14.3	10.0	5.7	4.6	4.3
			China	Madagascar	Mozambique	Brazil	India	Canada is 7th
Graphite	t	1,600,000	1,270,000	89,000	75,000	68,000	27,800	20,000
	% of world total		79.4	5.6	4.7	4.3	1.7	1%
			Australia	Chile	China	Zimbabwe	Argentina	Canada is 7th
Lithium	t	240,000	88,000	49,000	41,000	22,000	18,000	4,300
	% of world total		36.7	20.4	17.1	9.2	7.5	1.8
			China	United States	Russia/Saudi Arabia		UAE	Canada is 7th
Sulfur	000 t	85,000	19,000	8,200	7,500		6,000	5,000
	% of world total		22.4	9.6	8.8		7.1	5.9
			Australia	Brazil	China/India		Russia	Canada is 8th
Iron ore (mine production) (Usable ore)	mt	2,500	930	440	270		91	54
	% of world total		37.2	17.6	10.8		3.6	2.2
			China	India	United States/ Russia		Indonesia	Canada is 8th
Nitrogen (fixed)--ammonia	000 t	150,000	47,000	15,000	14,000		6,000	3,600
	% of world total		31.3	10.0	9.3		4.0	2.4
			China	Brazil	Norway	France	Germany	Canada is 8th
Silicon (metal)	000 t	4,600	3,900	190	120	90	60	30
	% of world total		84.8	4.1	2.6	2.0	1.3	0.7

		Rank of Five Leading Countries						
		World	1	2	3	4	5	
			Chile	DR Congo	Peru	China	United States/ Indonesia	Canada is 12th
Copper (mine production)	000 t	23,000	5,300	3,300	2,600	1,800	1,100	450
	% of world total		23.0	14.3	11.3	7.8	4.8	2.0
			China	Peru	Chile	United States	Mexico	Canada is 12th
Molybdenum (Mo content) (mine production)	t	260,000	110,000	41,000	38,000	33,000	17,000	1,200
	% of world total		42.3	15.8	14.6	12.7	6.5	0.5
			China	India	Indonesia	United States	Australia	Canada is 13th
Coal	Mt	9,089	4,759	1,091	833	464	455	43
	% of world total		52.4	12.0	9.2	5.1	5.0	0.5
			China	India	United States	Russia	Brazil	Canada is 14th
Lime	000 t	420,000	310,000	17,000	16,000	11,000	8,100	1,900
	% of world total		73.8	4.0	3.8	2.6	1.9	0.5
			United States	China	Netherlands	Italy	Turkey	Canada is 16th
Sand and Gravel (Industrial) (mine production)	000 t	440,000	130,000	89,000	60,000	33,000	13,000	4,100
	% of world total		29.5	20.2	13.6	7.5	3.0	0.9
			United States	Iran	Oman	China	Spain	Canada is 17th
Gypsum (mine production)	000 t	160,000	22 000	16,000	14,000	12,000	11,000	2,400
	% of world total		13.8	10.0	8.8	7.5	6.9	1.5

Sources: U.S. Geological Survey (USGS); bp Statistical Review of World Energy; Nuclear Energy Agency; Kimberley Process; International Energy Agency

n.a. Not applicable.

12023 data

ANNEX 4: MINERAL PRODUCTION OF CANADA, 2015-2024 (p)

	Unit	2015		2016		2017		2018		2019	
		(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)
METALLIC MINERALS											
Antimony	t	1	5	0	3	1	11	5	54	..	..
Bismuth	t	2	29	2	31	4	59	5	58	..	..
Cadmium	t	68	102	60	113	158	381	148	595	..	..
Cesium	t	x	x	x	x	x	x	x	x	..	..
Cobalt	t	4,339	156,720	4,216	149,145	3,704	290,783	3,279	310,086	4,365	180,029
Copper	t	697,322	4,905,661	679,524	4,379,532	580,097	4,639,616	527,510	4,422,120	551,562	4,293,553
Gold	kg	160,751	7,667,339	161,497	8,590,179	172,877	9,069,125	191,882	10,118,125	189,516	11,373,300
Ilmenite	000 t	x	x	x	x	x	x	x	x	..	..
Indium	kg	x	x	x	x	x	x	x	x	..	..
Iron ore ⁵	000 t	46,220	2,854,585	46,731	3,165,022	50,300	4,693,042	52,755	4,949,188	54,895	6,445,411
Iron, remelt	000 t	x	x	x	x	x	x	x	x	x	x
Lead	t	3,699	8,485	12,020	29,785	13,494	40,589	15,605	45,131	x	x
Lithium	t	-	-	-	-	-	-	x	x	-	-
Molybdenum	t	2,505	48,846	2,783	53,105	4,765	112,054	5,048	152,725	4,367	142,908
Nickel	t	225,351	3,408,431	230,210	2,926,428	206,354	2,787,020	175,761	2,970,887	172,743	3,288,404
Niobium (Columbium)	t	5,385	x	6,099	x	x	x	x	x	x	x
Platinum group	kg	33,248	1,059,512	31,471	947,560	27,342	1,016,402	28,596	1,206,948	32,566	1,946,378
Selenium	t	156	6,575	175	3,886	72	3,204	85	4,133	..	..
Silver	t	371	239,656	385	282,666	368	261,688	392	254,759	380	258,383
Tantalum	t	-	-	-	-	-	-	-	-	-	-
Tellurium	t	10	990	18	870	18	885	x	x	-	-
Titanium dioxide ⁵	t	-	-	-	-	-	-	-	-	x	x
Tungsten	t	2,289	62,339	-	-	-	-	-	-	-	-
Uranium	t	13,279	1,609,476	14,133	1,248,600	12,207	876,473	6,975	490,077	6,997	524,781
Zinc	t	275,410	632,892	301,210	832,545	305,314	1,146,760	287,632	1,087,538	263,941	840,313
TOTAL, METALLIC MINERALS		..	23,125,240	..	23,302,112	..	25,738,171	..	27,058,554	..	29,694,819

		2020		2021		2022		2023		2024 (p)	
Unit		(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)
METALLIC MINERALS											
Antimony	t	..	..	..	..	..	..	..	..	..	..
Bismuth	t	..	..	..	..	..	..	..	..	..	..
Cadmium	t	..	..	..	..	..	..	..	..	..	..
Cesium	t	..	..	..	..	..	..	..	..	..	..
Cobalt	t	4,328	181,730	3,964	229,966	3,573	271,031	3,238	x	3,361	113,721
Copper	t	577,228	4,215,890	507,120	5,569,829	643,355	5,546,945	485,375	5,074,068	534,610	4,504,092
Gold	kg	177,732	13,533,630	189,926	13,404,004	195,145	14,328,527	188,762	15,874,530	198,899	16,889,604
Ilmenite	000t	..	..	..	..	..	..	0	-	-	-
Indium	kg	..	..	..	..	..	..	..	..	..	..
Iron ore ⁵	000t	60,914	8,752,568	55,667	11,340,891	59,659	9,995,582	42,529	5,631,420	43,643	5,580,895
Iron, remelt	000t	x	x	x	x	x	x	x	x	x	x
Lead	t	x	x	8,224	21,968	4,131	10,889	x	x	-	-
Lithium	t	-	-	54,756	x	115,549	x	32,528	x	39,230	x
Molybdenum	t	2,442	x	1,426	x	1,618	x	1,099	73,131	1,492	66,958
Nickel	t	178,222	2,961,262	159,885	3,272,094	123,209	4,023,942	126,177	3,266,965	124,996	2,760,094
Niobium (Columbium)	t	x	x	x	x	x	x	x	x	x	x
Platinum group	kg	16,473	1,409,631	20,484	1,915,297	19,621	1,547,312	23,735	1,359,891	22,909	1,094,993
Selenium	t	..	..	..	..	..	..	..	..	..	..
Silver	t	291	264,013	286	279,209	281	238,227	249	239,297	346	238,226
Tantalum	t	-	-	-	-	-	-	-	-	-	-
Tellurium	t	-	-	-	-	-	-	-	-	-	-
Titanium dioxide ⁵	t	x	x	x	x	x	x	x	x	x	x
Tungsten	t	-	-	-	-	-	-	-	-	-	-
Uranium	t	3,704	328,206	4,768	464,910	6,929	986,438	10,168	1,946,446	13,479	3,136,915
Zinc	t	230,137	561,804	231,573	753,755	185,315	663,208	103,911	256,672	118,556	171,565
TOTAL, METALLIC MINERALS		..	32,513,321	..	37,594,761	..	38,034,488	..	37,979,373	..	38,408,485

	Unit	2015		2016		2017		2018		2019	
		(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)
NONMETALLIC MINERALS											
Barite	000 t	x	x	x	x	x	x	x	x	x	x
Carbonatite	000 t	x	x	x	x	x	x	-	-	-	-
Cement ¹	000 t	12,334	1,689,851	11,820	1,615,674	..	..	..	..	..	..
Chrysotile	000 t	x	x	x	x	-	-	-	-	-	-
Clay	000 t	-	-	-	-	-	-	-	-	364	1,216
Clay products ²	000 t	..	124,446	..	140,122	..	147,131	..	131,928	384	x
Diamonds	000 ct	11,677	2,148,583	13,315	1,888,732	23,199	2,677,723	22,789	2,704,302	18,363	2,301,989
Gemstones	t	8,233	7,953	154	5,852	89	4,612	87	2,349	64	1,746
Graphite	000 t	x	x	x	x	14	20,336	11	19,156	11	x
Gypsum ³	000 t	1,726	19,675	1,679	17,655	3,001	33,120	3,240	40,157	2,452	38,361
Lime	000 t	1,852	335,489	1,807	330,366	1,842	336,642	1,785	335,739	1,976	374,340
Magnesite	000 t	x	x	x	x	x	x	x	x	x	x
Marl	000 t	-	-	-	-	-	-	-	-	-	-
Mica	000 t	x	x	x	x	x	x	x	x	x	x
Nepheline syenite	000 t	614	97,880	571	81,219	612	64,712	565	131,689	524	115,844
Peat	000 t	1,297	257,030	1,452	330,653	1,459	330,991	1,306	314,924	1,422	352,637
Phosphate	000 t	-	-	-	-	-	-	-	-	-	-
Potash (MOP)	000 t	-	-	-	-	-	-	-	-	20,717	6,422,081
Potash (K ₂ O) ⁴	000 t	11,462	6,132,751	10,790	3,735,632	12,563	4,371,065	14,024	5,726,798	12,686	-
Potassium sulphate	000 t	x	x	x	x	x	x	x	x	x	x
Pumice	000 t	x	x	5	273	x	x	x	x	x	x
Quartz (silica) ⁵	000 t	2,053	107,377	2,256	95,614	2,540	99,278	4,864	202,387	..	..
Salt	000 t	14,343	791,980	10,252	445,891	11,424	476,674	10,713	488,535	11,798	577,942
Sand and gravel	000 t	228,030	1,884,531	280,550	2,398,633	231,219	2,095,005	245,815	2,284,402	193,017	1,921,544
Soapstone, talc, pyrophyllite	000 t	175	50,335	199	55,513	215	51,754	279	42,635	x	x
Sodium sulphate	000 t	x	x	x	x	x	x	x	x	x	x
Stone ³	000 t	158,034	1,687,916	160,016	1,664,188	169,518	1,747,125	188,974	1,987,973	152,570	1,770,069
Sulphur, elemental	000 t	5,187	423,452	4,746	193,877	4,803	206,740	4,828	449,441	..	..
Sulphur, in smelter gas	000 t	558	114,383	635	110,307	524	72,739	505	87,206	..	..
Sulphuric Acid	000 t	-	-	-	-	-	-	-	-	-	-
Titanium dioxide ⁵	000 t	x	x	x	x	x	x	x	x	..	..
Wollastonite	000 t	-	-	x	x	x	x	x	x	x	x
Zeolite	000 t	-	-	x	x	1	5	1	12	x	x
TOTAL, NONMETALLIC MINERALS (including cement ¹)		..	16,519,513	..	13,724,154	..	..	..	..	..	..
TOTAL, NONMETALLIC MINERALS (excluding cement ¹)		..	14,829,662	..	12,108,480	..	13,304,062	..	15,530,709		

	Unit	2020		2021		2022		2023		2024 (p)	
		(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)
NONMETALLIC MINERALS											
Barite	000 t	x	x	x	x	x	x	x	x	x	x
Carbonatite	000 t	-	-	-	-	-	-	-	-	-	-
Cement ¹	000 t	..	..	..	..	..	..	..	..	..	..
Chrysotile	000 t	-	-	-	-	-	-	-	-	-	-
Clay	000 t	196	x	235	1,948	262	2,662	161	x	119	1,414
Clay products ²	000 t	336	x	299	x	336	x	500	x	468	x
Diamonds	000 ct	14,293	1,332,035	17,593	1,840,664	16,046	2,186,052	16,290	2,053,351	13,945	1,472,543
Gemstones	t	80	x	50	1,458	x	x	70	x	46,314	x
Graphite	000 t	8	x	13	x	x	x	x	x	x	x
Gypsum ³	000 t	3,054	50,898	2,922	50,680	3,368	66,729	3,379	118,373	3,412	127,173
Lime	000 t	1,559	222,477	1,854	334,426	1,681	312,829	1,300	313,191	1,276	324,818
Magnesite	000 t	x	x	x	x	x	x	x	x	x	x
Marl	000 t	-	-	-	-	-	-	-	-	-	-
Mica	000 t	15	x	15	x	14	x	13	x	15	x
Nepheline syenite	000 t	652	132,610	691	140,494	769	156,206	x	213,946	x	279,896
Peat	000 t	1,481	331,803	1,876	304,249	1,913	379,025	1,477	356,918	1,611	355,680
Phosphate	000 t	-	-	-	-	-	-	-	-	-	-
Potash (MOP)	000 t	22,682	6,350,613	22,934	7,995,825	22,681	17,634,352	23,583	11,937,497	25,463	8,679,019
Potash (K ₂ O) ⁴	000 t	13,904	-	14,047	-	13,804	-	14,463	-	14,223	-
Potassium sulphate	000 t	x	x	x	x	x	x	x	x	x	x
Pumice	000 t	x	x	x	x	x	x	x	x	x	x
Quartz (silica) ⁶	000 t	..	..	..	..	-	-	-	-	-	-
Salt	000 t	12,643	551,441	11,170	433,278	14,130	847,305	11,813	534,646	9,872	543,386
Sand and gravel	000 t	209,685	2,036,309	219,669	2,174,273	252,545	2,262,919	253,355	2,539,264	242,834	2,618,803
Soapstone, talc, pyrophyllite	000 t	x	x	x	51,651	x	51,050	x	x	x	x
Sodium sulphate	000 t	x	x	x	x	x	x	x	x	x	x
Stone ³	000 t	151,551	1,408,809	173,177	1,653,114	105,647	1,180,395	143,743	1,647,634	118,110	1,507,205
Sulphur, elemental	000 t	..	..	..	..	..	..	..	..	..	..
Sulphur, in smelter gas	000 t	..	..	..	..	..	..	..	..	..	..
Sulphuric Acid	000 t	-	-	-	-	-	-	-	-	-	-
Titanium dioxide ⁵	000 t	..	..	..	..	..	..	..	..	..	..
Wollastonite	000 t	x	x	x	x	x	x	x	x	x	x
Zeolite	000 t	-	-	1	10	510	4	0.5	4	x	4
TOTAL, NONMETALLIC MINERALS (including cement ¹)		..	..	..	..	..	..	..	..	..	..
TOTAL, NONMETALLIC MINERALS (excluding cement ¹)		..	12,681,255	..	15,192,990	..	25,250,592	..	20,032,355	..	16,255,635

	Unit	2015		2016		2017		2018		2019	
		(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)
MINERAL FUELS											
Coal	000 t	61,985	3,126,266	61,332	4,009,353	60,750	6,280,947	54,599	6,459,413	51,746	5,625,050
TOTAL MINERAL FUELS		61,985	3,126,266	61,332	4,009,353	60,750	6,280,947	54,599	6,459,413	51,746	5,625,050
TOTAL MINERAL PRODUCTION (including cement ¹)		..	42,771,019	..	41,035,618	..	..	..	..	..	..
TOTAL MINERAL PRODUCTION (excluding cement ¹)		..	41,081,168	..	39,419,944	..	45,323,180	..	49,048,676	..	49,463,580

	Unit	2020		2021		2022		2023		2024 (p)	
		(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)	(quantity)	(\$000)
MINERAL FUELS											
Coal	000 t	40,824	3,956,724	48,443	8,521,495	46,217	15,217,465	48,741	12,408,347	42,544	9,663,101
TOTAL MINERAL FUELS		40,824	3,956,724	48,443	8,521,495	46,217	15,217,465	48,741	12,408,347	42,544	9,663,101
TOTAL MINERAL PRODUCTION (including cement ¹)		..	..	..	..	..	..	..	..	..	..
TOTAL MINERAL PRODUCTION (excluding cement ¹)		..	49,151,299	..	61,309,246	..	78,502,545	..	70,420,075	..	64,327,221

Sources: Natural Resources Canada; Statistics Canada.

(p) Preliminary; x Confidential; – Nil; . . Not available.

Notes:

- (1) As of reference year 2017, Statistics Canada has ceased the collection of the cement data. NRCAN is no longer deducting the quantity and value of gypsum, sand and gravel, silica, and stone used in the manufacture of cement products from the totals for gypsum, sand and gravel, silica, and stone.
- (2) Production values for bentonite and diatomite have been included in clay products.
- (3) Shipments of gypsum, silica and stone to Canadian cement, lime and clay plants are not included in this table.
- (4) Shipments of potash to Canadian potassium sulphate plants are not included in this table.
- (5) As of 2022, the iron ore value reported comprises concentrates only as agglomerates value is not suppressed by the source. Numbers may not add due to rounding.
- (5) As of 2019, titanium dioxide is classified as a metal by the source whereas previously it was reported with non-metal.

ANNEX 5: CANADIAN RESERVES OF SELECTED MAJOR METALS, 1978-2024 (p)

Metal Contained in Proven and Probable Mineable Ore (1) in Operating Mines (2) and Deposits Committed to Production

YEAR	COPPER	NICKEL	LEAD	ZINC	MOLYBDENUM	SILVER	GOLD (3)
	(000 t)	(000 t)	(000 t)	(000 t)	(000 t)	(t)	(t)
1978	16,184	7,843	8,930	26,721	464	30,995	505
1979	16,721	7,947	8,992	26,581	549	32,124	575
1980	16,714	8,348	9,637	27,742	551	33,804	826
1981	15,511	7,781	9,380	26,833	505	32,092	851
1982	16,889	7,546	9,139	26,216	469	31,204	833
1983	16,214	7,393	9,081	26,313	442	31,425	1,172
1984	15,530	7,191	9,180	26,000	361	30,757	1,208
1985	14,201	7,041	8,503	24,553	331	29,442	1,373
1986	12,918	6,780	7,599	22,936	312	25,914	1,507
1987	12,927	6,562	7,129	21,471	231	25,103	1,705
1988	12,485	6,286	6,811	20,710	208	26,122	1,801
1989	12,082	6,092	6,717	20,479	207	24,393	1,645
1990	11,261	5,776	5,643	17,847	198	20,102	1,542
1991	11,040	5,691	4,957	16,038	186	17,859	1,433
1992	10,755	5,605	4,328	14,584	163	15,974	1,345
1993	9,740	5,409	4,149	14,206	161	15,576	1,333
1994	9,533	5,334	3,861	14,514	148	19,146	1,513
1995	9,250	5,832	3,660	14,712	129	19,073	1,540
1996	9,667	5,623	3,450	13,660	144	18,911	1,724
1997	9,032	5,122	2,344	10,588	149	16,697	1,510
1998	8,402	5,683	1,845	10,159	121	15,738	1,415
1999	7,761	4,983	1,586	10,210	119	15,368	1,326
2000	7,419	4,782	1,315	8,876	97	13,919	1,142
2001	6,666	4,335	970	7,808	95	12,593	1,070
2002	6,774	4,920	872	6,871	82	11,230	1,023
2003	6,037	4,303	749	6,251	78	9,245	1,009
2004	5,546	3,846	667	5,299	80	6,568	787
2005	6,589	3,960	552	5,063	95	6,684	965
2006	6,923	3,940	737	6,055	101	6,873	1,032
2007	7,565	3,778	682	5,984	213	6,588	987
2008	7,456	3,605	636	5,005	222	5,665	947

YEAR	COPPER	NICKEL	LEAD	ZINC	MOLYBDENUM	SILVER	GOLD (3)
	(000 t)	(000 t)	(000 t)	(000 t)	(000 t)	(t)	(t)
2009	7,290	3,301	451	4,250	215	6,254	918
2010	10,747	3,074	400	4,133	254	6,916	1,473
2011	10,570	2,936	247	4,812	256	6,954	2,225
2012	10,364	2,617	126	4,163	256	5,598	2,148
2013	10,777	2,682	116	3,532	145	5,013	2,140
2014	10,214	2,287	88	2,972	121	5,498	2,070
2015	9,937	2,725	83	3,009	101	5,345	1,984
2016	9,101	2,604	40	2,231	98	3,626	1,910
2017	8,984	2,790	165	2,286	96	5,074	2,578
2018	8,115	2,296	118	1,913	77	4,865	2,597
2019	7,348	2,236	203	2,180	75	4,480	2,359
2020	7,001	1,977	176	1,630	69	5,223	2,611
2021	7,713	1,909	160	1,454	80	4,714	2,719
2022	8,254	2,219	79	947	64	4,865	3,127
2023r	6,700	2,301	58	663	70	5,473	3,292
2024p	6,298	2,065	64	646	65	5,646	3,133

Source: Natural Resources Canada, based on company reports and the Federal-Provincial/Territorial Annual Survey of Mines and Concentrators.

(1) No allowance is made for losses in milling, smelting and refining. Excludes material classified as “resources.”

(2) Includes metal in mines where production has been suspended temporarily.

(3) Excludes metal in placer deposits because reserves data are generally unavailable.

(r) Revised; (p) Preliminary.

Note: One tonne (t) = 1.1023113 short tons = 32 150.746 troy oz.

ANNEX 6: EMPLOYMENT AND ANNUAL COMPENSATION IN THE CANADIAN MINING, SMELTING AND REFINING INDUSTRIES, 2011-2024

	NUMBER OF EMPLOYEES	COMPENSATION PER JOB ⁽¹⁾
Metal Mines		
2011	30,450	114,358
2012	31,400	120,831
2013	40,165	116,991
2014	39,170	123,926
2015	34,985	128,624
2016	39,300	126,980
2017	40,575	124,944
2018	41,150	128,692
2019	43,165	133,433
2020	43,455	139,734
2021	46,025	139,484
2022	49,715	144,725
2023	49,560	155,052
2024	51,290	157,947
Non-metal Mines		
2011	19,390	98,574
2012	18,750	102,643
2013	21,975	99,268
2014	23,060	103,242
2015	22,620	108,431
2016	22,550	104,748
2017	24,290	104,736
2018	25,055	108,170
2019	25,320	105,090
2020	24,700	109,635
2021	25,530	113,564
2022	27,265	117,871
2023	27,360	123,963
2024	27,275	128,809
Coal Mines		
2011	7,090	111,668
2012	7,800	110,386
2013	10,270	110,569
2014	8,510	112,487
2015	6,850	117,486
2016	8,100	116,440
2017	7,820	120,410
2018	8,970	125,808
2019	9,085	126,696
2020	7,925	129,510
2021	8,325	129,505
2022	10,875	125,179
2023	11,535	132,319
2024	11,205	134,863

	NUMBER OF EMPLOYEES	COMPENSATION PER JOB (1)
Smelting & Refining ⁽²⁾		
2011	54,135	99,131
2012	46,665	106,099
2013	46,735	108,968
2014	45,240	108,814
2015	45,785	110,328
2016	45,440	110,676
2017	46,030	114,175
2018	44,220	120,817
2019	43,310	122,610
2020	40,130	129,498
2021	43,060	129,599
2022	41,450	133,502
2023	41,620	143,874
2024	41,095	148,267
Total Mining, Smelting and Refining		
2011	111,065	104,009
2012	104,615	110,221
2013	119,145	110,021
2014	115,980	113,079
2015	110,240	116,190
2016	115,390	115,475
2017	118,715	116,335
2018	119,395	121,252
2019	120,880	123,112
2020	116,210	129,104
2021	122,940	129,963
2022	129,305	133,821
2023	130,075	142,920
2024	130,865	146,858

Source: Statistics Canada; Natural Resources Canada. Table: 36-10-0489-01 (formerly CANSIM 383-0031)

(1) Compensation for Smelting and Refining and Total based on weighted average - $\frac{\sum(\#jobs \times job \text{ compensation within each NAICS})}{\sum total \text{ jobs for the added NAICS}}$

(2) Comprised of NAICS 3311, NAICS 3313, and NAICS 3314.

ANNEX 7: TOTAL COMPENSATION PER JOB, BY SELECT CANADIAN INDUSTRIAL SECTOR, 2011-2024(p)

	Forestry and Logging	Mining, Smelting and Refining (1)	Manufacturing	Construction	Finance & Insurance
2011	70,598	104,009	67,348	66,051	66,619
2012	74,734	110,221	69,684	68,753	69,194
2013	77,168	110,022	71,367	71,111	71,271
2014	81,147	113,080	73,714	74,302	74,988
2015	84,172	116,190	75,180	74,460	80,037
2016	80,550	115,475	74,647	72,831	82,324
2017	81,447	116,335	75,143	72,412	86,168
2018	82,985	121,252	77,515	74,338	91,489
2019	81,889	123,112	78,757	75,565	93,037
2020	85,498	129,104	84,563	79,361	99,231
2021	88,527	129,963	84,670	80,746	99,319
2022	94,058	133,821	89,382	85,154	104,648
2023	101,857	142,920	95,344	88,343	108,087
2024(p)	103,919	146,858	98,656	91,163	113,170

Sources: [Statistics Canada](#) Table 36-10-0489-01; Natural Resources Canada.

(1) Based on a weighted average of NAICS 212, 3311, 3313, and 3314 (refer to Annex 7).

ANNEX 8: VALUE (\$) OF DOMESTIC EXPORTS OF MINERALS AND MINERAL PRODUCTS, BY COMMODITY AND COUNTRY OF DESTINATION, 2024

METALS	United States of America	United Kingdom	European Union (EU-27)	China	Switzerland	Other Countries	Total
Aluminum	15,792,694,612	23,638,012	476,334,906	138,597,278	738,132	970,128,140	17,402,131,080
Antimony	1,794,490	240,381	14,443	0	0	42,892	2,092,206
Barium	358,710	0	2,085	0	0	0	360,795
Beryllium	10,403	0	6,534	0	0	18,901	35,838
Bismuth	410,480	2,000	16,309	55,718	0	87,033	571,540
Cadmium	99,318	0	5,049,032	170,708	0	4,463,367	9,782,425
Calcium metals	6,160,179	0	523	0	0	319,049	6,479,751
Chromium	3,841,466	420	57,167	863	0	-29,275	3,870,641
Cobalt	66,212,434	10,380,956	105,942,605	53,909,299	0	107,255,576	343,700,870
Copper	5,581,860,572	10,235,488	547,536,033	2,024,710,374	387,902	2,503,717,180	10,668,447,549
Germanium	14,226,660	166,601	183,280	0	0	29,949,984	44,526,525
Gold	9,194,804,825	22,710,788,045	9,559,710	504,782,237	5,163,303,669	3,097,344,833	40,680,583,319
Hafnium	9,444,531	0	4,992,812	0	0	-4,992,812	9,444,531
Iron and steel	18,623,314,052	47,130,008	304,300,508	53,638,773	3,916,992	1,568,237,116	20,600,537,449
Iron ore	384,589,285	139,521,858	3,135,032,110	2,443,421,482	0	2,664,128,317	8,766,693,052
Lead	522,878,292	349,742	4,229,069	403,705	32,429	111,122,382	639,015,619
Lithium	1,076,811,038	3,254,933	6,562,114	5,233,611	72,009	20,982,196	1,112,915,901
Magnesium and magnesium compounds	87,277,867	5,783	164,389	813,480	70	479,201	88,740,790
Manganese	378,998	3,948	865,284	94,990	0	-154,923	1,188,297
Mercury	211,755	71,501	4,196	3,938	74	1,066	292,530
Molybdenum	22,385,870	4,824	27,365,026	30,485,213	19,217,754	18,211,958	117,670,645
Nickel	1,408,059,730	47,914,796	997,374,420	207,333,226	301,215	1,956,270,549	4,617,253,936
Niobium	161,932,257	0	131,473,517	47,810,559	0	65,920,211	407,136,544
Other metals	6,493,729,267	116,223,731	1,159,135,934	467,099,112	7,205,850	971,357,291	9,214,751,185
Platinum group metals	1,191,067,672	344,680	36,547,142	130,576	109,691,285	75,050,160	1,412,831,515
Rare earth elements (REEs)	2,355,749	16,506	204,941	0	104	150,950	2,728,250
Rhenium	6,068,044	522,852	1,798	0	0	-1,798	6,590,896
Selenium	624,326	0	589,546	7,827,943	0	733,965	9,775,780
Silicon	290,647,297	840	14,374,232	625,838	0	19,773,628	325,421,835
Silver	1,414,694,086	2,850,166	100,448,659	22,853,578	118,911,137	66,945,192	1,726,702,818
Tantalum	12,747,134	8,077	389,725	440,123	0	-311,076	13,273,983
Tellurium	718,430	238,667	57,128,797	0	0	-18,356,481	39,729,413
Tin	29,437,907	31,989	2,681,287	234,643	0	1,299,694	33,685,520
Titanium metal	78,016,241	4,511,804	64,804,965	2,400,018	1,049,100	16,608,286	167,390,414
Tungsten	26,817,889	4,041	4,420,160	307,329	275	1,219,747	32,769,441
Uranium and thorium	1,720,863,095	651,718,190	2,274,957,212	0	0	-717,919,533	3,929,618,964
Vanadium	46,982,344	656	344	0	0	30,265	47,013,609
Zinc	1,779,550,711	1,041,725	59,786,270	8,803,854	47,105,709	60,777,548	1,957,065,817
Zirconium	5,055,138	319,070	5,807,286	5,337,044	0	-3,373,255	13,145,283
TOTAL METALS	66,059,133,154	23,771,542,290	9,538,344,370	6,027,525,512	5,471,933,706	13,587,487,524	124,455,966,556

NONMETALS	United States of America	United Kingdom	European Union (EU-27)	China	Switzerland	Other Countries	Total
Abrasives	244,116,989	520,702	13,338,536	7,474,362	250,554	38,121,109	303,822,252
Arsenic	0	10,585	0	0	0	-10,499	86
Barite and witherite	70,528	0	0	0	0	0	70,528
Boron	1,400,382	75,398	1,848,962	308,010	0	3,143,318	6,776,070
Bromine	209,027	0	774	183	0	1,069	211,053
Cement	1,249,094,414	967,480	8,002,447	755,851	10,096	8,313,906	1,267,144,194
Chlorine and chlorine compounds	402,670,680	14,334	464,792	12,284	708	466,270	403,629,068
Chrysotile (Asbestos)	41,557,292	58,052	207,881	97,957	0	1,939,891	43,861,073
Clay and clay products	28,873,618	1,031,504	13,646,165	2,212,356	4,881	6,378,154	52,146,678
Diamonds	57,272,009	3,196,686	1,040,220,262	986,497	18,852	417,221,147	1,518,915,453
Dolomite	59,939,901	0	0	0	0	10,523	59,950,424
Feldspar	186,040	0	3,432	0	0	0	189,472
Fluorspar	5,993,644	6,641	374,999	0	2,285	2,382,852	8,760,421
Glass and glassware products	828,661,448	12,265,601	30,805,645	4,432,939	424,865	15,275,133	891,865,631
Granite	64,253,208	0	553,728	333,729	0	681,441	65,822,106
Graphite	65,153,562	1,317,760	16,242,900	1,448,358	525,691	7,123,033	91,811,304
Gypsum	130,882,810	57,668	293,009	256,657	21,819	751,590	132,263,553
Iodine	5,019,637	0	857,861	1,428	67	188,163	6,067,156
Lime	51,838,429	0	0	0	0	1,595	51,840,024
Limestone flux and other limestone	33,059,968	0	25,450	3,210	0	18,144	33,106,772
Marble travertine and other calcareous stones	30,072,073	132	94,633	468,728	0	370,269	31,005,835
Mica	7,228,230	238,306	583,045	205,127	0	3,656,587	11,911,295
Mineral pigments	166,186,836	249,786	588,928	138,326	0	6,365,277	173,529,153
Nepheline syenite	154,712,990	719,250	1,201,592	1,031,418	0	6,794,357	164,459,607
Other nonmetals	1,035,151,802	4,603,487	35,713,694	12,193,211	477,974	68,207,612	1,156,347,780
Other structurals	271,810,062	1,922,869	7,544,305	1,843,761	0	28,647,767	311,768,764
Peat	610,649,447	181,148	1,275,910	31,169	24,816	28,133,159	640,295,649
Phosphate and phosphate compounds	124,705,401	18,558	1,931,906	171,467	0	22,119,945	148,947,277
Potash and potassium compounds	4,236,668,761	15,541	349,530,123	499,663,971	0	2,867,702,236	7,953,580,632
Precious and semi-precious stones	1,997,120	17,505	31,990	0	17,120	34,031	2,097,766
Salt and sodium compounds	495,991,329	245,185	7,905,999	2,613,862	0	58,491,047	565,247,422

NONMETALS	United States of America	United Kingdom	European Union (EU-27)	China	Switzerland	Other Countries	Total
Sand and gravel	144,611,725	0	164,408	0	0	940,359	145,716,492
Sandstone	372,032	0	0	0	0	5,240	377,272
Silica and silica compounds	120,836,171	397,812	3,537,768	1,105,919	802,101	16,048,012	142,727,783
Slate	10,996,815	5,930,808	2,875,323	0	0	2,003,339	21,806,285
Sulphur and sulphur compounds	450,164,942	4,248	42,057	205,639,877	0	158,297,743	814,148,867
Talc soapstone and pyrophyllite	57,303,458	0	5,659,461	66,429	0	1,591,246	64,620,594
Titanium oxides	452,958,252	2,346,137	16,441,501	4,901,721	7,698	19,529,061	496,184,370
TOTAL NONMETALS	11,642,671,032	36,413,183	1,562,009,486	748,398,807	2,589,527	3,790,944,126	17,783,026,161

MINERAL FUELS	United States of America	United Kingdom	European Union (EU-27)	China	Switzerland	Other Countries	Total
Coal	667,002,852	4,937,294	665,901,064	2,753,800,292	0	6,063,593,236	10,155,234,738
Coke	14,386,540	0	0	0	0	688,402	15,074,942
TOTAL MINERAL FUELS	681,389,392	4,937,294	665,901,064	2,753,800,292	0	6,064,281,638	10,170,309,680

TOTAL MINING DOMESTIC EXPORTS	78,383,193,578	23,812,892,767	11,766,254,920	9,529,724,611	5,474,523,233	23,442,713,288	152,409,302,397
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Sources: Natural Resources Canada; Statistics Canada.

- Nil.

Note: Stages 1 to 4 - includes ores, concentrates and semi-fabricated and fabricated metal and mineral products.

ANNEX 9: VALUE (\$) OF IMPORTS OF MINERAL AND METAL PRODUCTS, BY COMMODITY AND COUNTRY OF IMPORT, 2024

METALS	United States of America	China	EU-27	Brazil	Mexico	Other Countries	Total
Aluminum	4,222,974,979	1,770,297,424	544,102,405	2,312,183,852	91,575,998	1,776,484,800	10,717,619,458
Antimony	5,457,348	17,674,063	5,269,198	0	74,384	11,284,239	39,759,232
Barium	5,611,231	2,196,254	711,511	0	0	230,574	8,749,570
Beryllium	1,352,533	9,023	47,787	0	0	28,533	1,437,876
Bismuth	2,810,968	287,611	0	0	5,320	356,832	3,460,731
Cadmium	55,028	54,030	5,888	0	0	16,028	130,974
Calcium metals	32,340,668	21,172,463	2,300,895	2,898,992	4,703,377	1,158,134	64,574,529
Chromium	7,999,902	9,960,995	28,112,857	9,201,522	713,746	60,650,517	116,639,539
Cobalt	29,179,127	646,290	10,024,595	0	222,350	10,001,402	50,073,764
Copper	3,632,267,701	307,378,103	1,238,881,434	79,731,695	50,413,597	1,196,927,232	6,505,599,762
Germanium	5,674,533	1,334,449	291,378	0	148	769,942	8,070,450
Gold	6,723,726,014	1,419,407	29,099,893	2,643,052,027	389,572,334	9,723,193,284	19,510,062,959
Hafnium	135	20,168,918	114,560	0	0	116,005	20,399,618
Iron and steel	15,764,561,743	4,875,222,155	3,483,589,407	436,783,708	1,738,917,974	6,525,573,736	32,824,648,723
Iron ore	1,047,949,095	2,284,739	25,790,363	31,578	606	7,943,508	1,083,999,889
Lead	950,261,953	99,264,791	108,870,892	4,123,517	77,989,749	259,272,515	1,499,783,417
Lithium	349,267,992	217,664,492	332,245,915	4,095	2,762,209	78,407,179	980,351,882
Magnesium and magnesium compounds	34,314,310	265,665,128	9,670,984	620,800	2,081,340	23,086,149	335,438,711
Manganese	80,473,525	84,441,164	12,912,594	2,039,856	1,848,900	224,685,319	406,401,358
Mercury	500,592	168,350	97,719	0	3,653	107,400	877,714
Molybdenum	62,769,240	4,975,028	930,443	422,978	5,198,554	42,822,198	117,118,441
Nickel	639,990,462	29,316,231	405,632,990	45,723,479	6,607,908	345,993,473	1,473,264,543
Niobium	464,521	0	0	31,245,241	0	782,231	32,491,993
Other metals	10,160,012,828	3,942,545,234	2,655,254,767	34,983,038	1,701,623,143	4,252,773,830	22,747,192,840
Platinum group metals	621,706,230	420,878	154,188,864	1,668,631	95,785	1,097,458,029	1,875,538,417
Rare earth elements (REEs)	2,489,695	2,321,147	657,629	0	0	1,304,380	6,772,851
Rhenium	4,473	9,488	473,984	0	0	0	487,945
Selenium	172,095	139	110,621	0	0	300,980	583,835
Silicon	6,976,830	15,702,046	2,451,194	36,902,486	0	48,835,939	110,868,495
Silver	795,194,133	47,725,303	429,366,811	6,334,647	160,367,399	1,075,102,584	2,514,090,877
Strontium	10,139	23,020	446,555	0	328,545	0	808,259
Tantalum	6,302,090	7,600,538	412,056	0	0	101,928	14,416,612
Tellurium	550,028	36,123,510	2,201,376	0	0	16,236,704	55,111,618
Thallium	4,408	0	0	0	0	130	4,538
Tin	29,024,791	2,949,506	11,938,060	18,761,221	1,373,045	60,630,901	124,677,524
Titanium metal	173,359,335	89,916,876	14,607,020	8,993	1,166,369	127,561,756	406,620,349
Tungsten	42,739,553	5,950,208	1,810,947	9,378	2,873	2,301,037	52,813,996
Uranium and thorium	14,100,152	0	386,922	0	0	931,546,869	946,033,943
Vanadium	5,979,222	15,334,490	5,285,169	10,521,618	0	15,177,842	52,298,341
Zinc	703,302,288	20,386,453	21,913,985	1	92,552,182	516,353,170	1,354,508,079
Zirconium	68,047,125	1,566,993	3,642,509	0	0	4,601,580	77,858,207
Grand Total	46,229,979,015	11,920,176,937	9,543,852,177	5,677,253,353	4,330,201,488	28,440,178,889	106,141,641,859

NONMETALS	United States of America	China	EU-27	Brazil	Mexico	Other Countries	Total
Abrasives	306,350,509	93,966,786	144,986,898	866,562	19,118,885	133,834,351	699,123,991
Arsenic	219,682	38,451	2,751	0	0	9,527	270,411
Barite and witherite	7,487,662	669,291	994,887	0	0	8,395,208	17,547,048
Boron	53,248,107	2,007,463	1,575,621	225,555	0	51,176,024	108,232,770
Bromine	375,499	194,302	10,058	164	0	1,690,016	2,270,039
Cement	582,408,890	183,158,199	109,077,737	970,229	39,966,098	153,561,117	1,069,142,270
Chlorine and chlorine compounds	152,358,834	26,077,509	8,400,501	2	1,500,384	16,045,657	204,382,887
Chrysotile (Asbestos)	235,352,131	10,643,160	8,010,518	689,417	337,181	21,724,359	276,756,766
Clay and clay products	427,862,692	537,162,383	355,926,265	57,673,439	102,467,947	205,837,284	1,686,930,010
Diamonds	40,054,319	4,133,525	10,590,579	53,180	14,181	242,606,321	297,452,105
Dolomite	19,239,874	67,976	6,778	0	0	252,151	19,566,779
Feldspar	282,954	0	8,948	0	98	33,044	325,044
Fluorspar	28,364,426	12,719,197	32,126,805	0	77,409,294	12,529,467	163,149,189
Glass and glassware products	2,279,335,457	796,946,730	337,889,283	1,357,675	298,755,126	255,813,433	3,970,097,704
Granite	14,470,098	17,282,472	8,850,633	7,676,517	18,458	20,685,881	68,984,059
Graphite	115,180,675	323,470,976	126,441,500	40,162	7,208,241	86,775,755	659,117,309
Gypsum	249,228,640	837,043	61,901,132	168,077	16,228,963	3,626,625	331,990,480
Iodine	8,773,080	47,822	61,104	0	125	21,102,029	29,984,160
Lime	65,580,809	24,650	1,201,660	0	42,464	2,101,386	68,950,969
Limestone flux and other limestone	32,244,817	362,043	622,429	0	0	660,068	33,889,357
Marble travertine and other calcareous stones	19,699,600	20,643,710	36,663,746	3,441,025	732,345	16,758,220	97,938,646
Mica	4,156,049	4,630,109	802,182	76,029	14,826	676,858	10,356,053
Mineral pigments	177,458,074	11,816,682	37,295,112	14,650	3,246,384	21,363,863	251,194,765
Nepheline syenite	2,280,887	270,366	0	0	0	26,126	2,577,379
Olivine	833,336	147,142	31,313	153	1,833	373,567	1,387,344
Other nonmetals	1,570,649,953	612,352,503	259,975,407	10,647,217	41,112,982	193,574,214	2,688,312,276
Other structurals	157,328,421	53,054,802	35,398,852	13,526,509	6,176,227	37,701,071	303,185,882
Peat	21,215,442	66,826	7,917,533	199	894	1,044,529	30,245,423
Perlite	15,600,701	1,940	0	0	142,742	3,173	15,748,556
Phosphate and phosphate compounds	1,337,096,382	20,259,220	15,935,481	26,852	80,234,861	600,443,995	2,053,996,791
Potash and potassium compounds	115,364,284	10,763,188	9,332,250	0	71,081	30,851,396	166,382,199
Precious and semi-precious stones	15,451,528	37,035,282	1,925,220	573,310	127,643	24,805,820	79,918,803
Salt and sodium compounds	730,279,919	41,729,810	57,571,590	1,354,834	32,073,709	150,330,353	1,013,340,215

NONMETALS	United States of America	China	EU-27	Brazil	Mexico	Other Countries	Total
Sand and gravel	33,153,756	1,119,371	273,098	36,735	196,369	317,297	35,096,626
Sandstone	1,769,070	81,963	653	0	0	2,016,135	3,867,821
Silica and silica compounds	544,403,577	53,211,504	29,253,913	1,221,145	6,108,434	21,255,417	655,453,990
Slate	2,496,273	1,491,285	187,398	686,904	0	722,549	5,584,409
Sulphur and sulphur compounds	33,015,287	2,416,559	2,058,245	0	0	969,386	38,459,477
Talc soapstone and pyrophyllite	19,019,083	1,292,244	587,342	174,939	503	89,562	21,163,673
Titanium oxides	239,882,291	110,420,178	14,177,055	471	13,469,571	10,562,959	388,512,525
Grand Total	9,659,573,068	2,992,614,662	1,718,072,477	101,501,951	746,777,849	2,352,346,193	17,570,886,200

MINERAL FUELS	United States of America	China	EU-27	Brazil	Mexico	Other Countries	Total
Coal	1,122,778,893	2,325,102	18,051,097	10,768	636	237,463,543	1,380,630,039
Coke	537,112,312	2,570	2,618,161	0	6,313	8,004,072	547,743,428
TOTAL MINERAL FUELS	1,659,891,205	2,327,672	20,669,258	10,768	6,949	245,467,615	1,928,373,467

TOTAL MINING IMPORTS	57,549,443,288	14,915,119,271	11,282,593,912	5,778,766,072	5,076,986,286	31,037,992,697	125,640,901,526
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Sources: Natural Resources Canada; Statistics Canada.

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Note: Stages 1 to 4 - includes ores, concentrates and semi-fabricated and fabricated metal and mineral products.



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