BC exploration spending declines as flagship projects mature – a call for grassroots growth

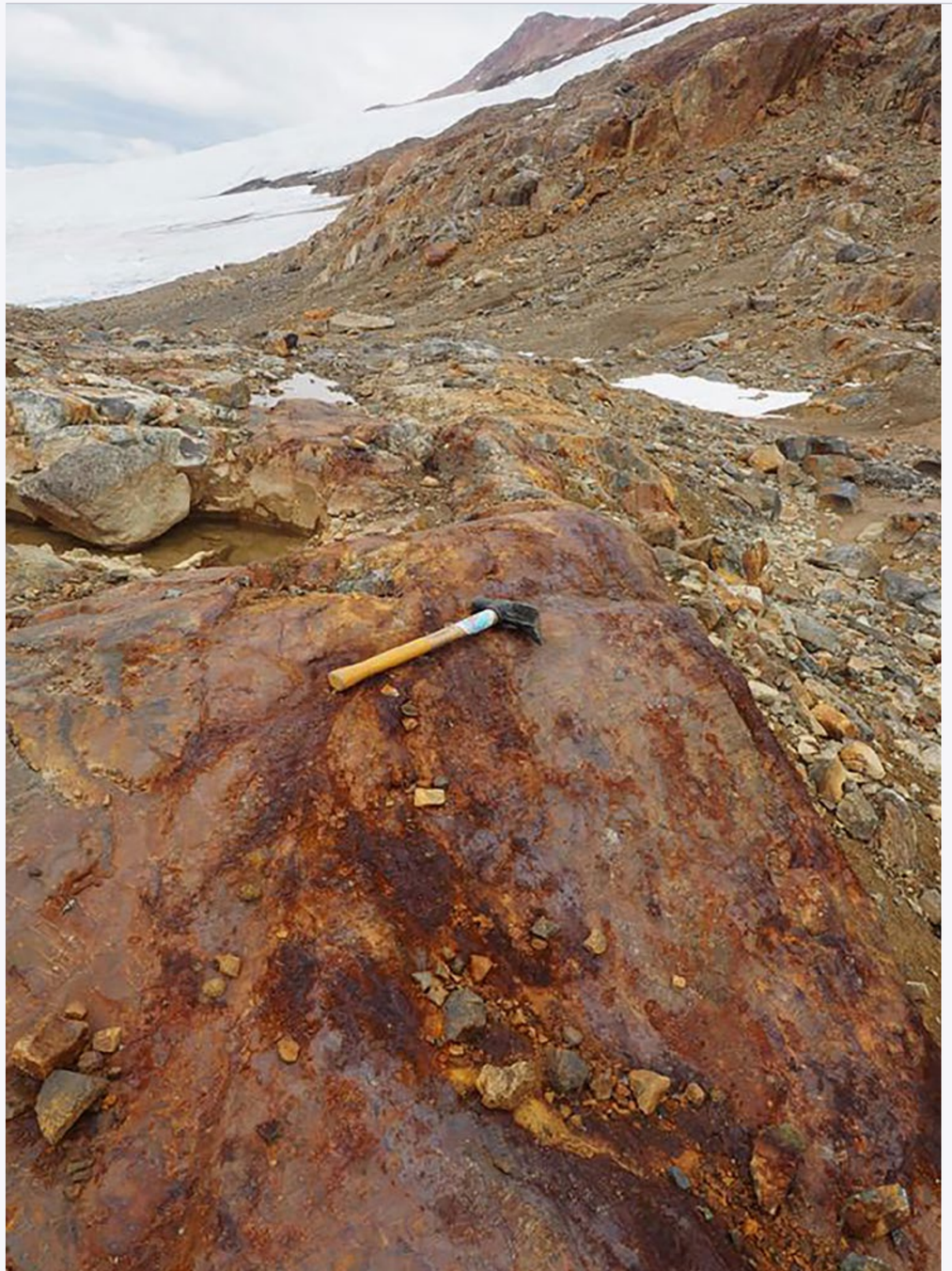
Insights from the BC Mineral and Coal Exploration Survey 2024

EY
Shape the future with confidence

BRITISH COLUMBIA GEOLOGICAL SURVEY est. 1895

BRITISH COLUMBIA
Ministry of Mining and Critical Minerals

AME
Association for Mineral Exploration



Foreword

The *British Columbia Mineral and Coal Exploration Survey* is a joint initiative between the Government of British Columbia's Ministry of Mining and Critical Minerals, the Association for Mineral Exploration (AME) and EY. The survey was conducted to provide a view of the current state of the mineral and coal exploration industry in British Columbia.

Data and analysis presented in this report are for the period January 1 through December 31, 2024 and are based on survey responses and information collected from financial reports and press releases from 130 companies operating in BC, which collectively represent 283 projects across the province.

For ease of completion, the survey is designed to be similar to, though broader than, Natural Resources of Canada's (NRCAN) *Survey of Mineral Exploration, Deposit Appraisal and Mine Complex Development Expenditures*.

Thank you to survey participants

We thank the survey participants who shared their time and information.

Contents

DISCLAIMER

EY teams have relied on unaudited financial information provided by mineral and coal exploration companies in BC, third-party research and information provided by other data sources and relevant associations and bodies. EY teams have not audited, reviewed or otherwise attempted to verify the accuracy or completeness of such information.

Financial information referred to in this report was prepared based on figures provided by entities, estimates and assumptions. As such, readers are cautioned that variations between estimations and actuals could be material.

Unless otherwise stated, all monetary amounts contained herein are expressed in Canadian dollars (C$).

EMLI staff assisted in the collection of survey data and information. Specifically, where a response had incomplete or inconsistent information, key data points were solicited directly from the companies by Regional Geologists at the Mineral Development Office of the British Columbia Geological Survey and assessed using professional opinion and experience. Financial statement data and press release information were used in selected instances where no response was received from companies.

> For the ninth year, we are pleased to present the findings of the *British Columbia Mineral and Coal Exploration Survey*. Data and analysis presented in the survey are based on information collected from 130 mineral and coal exploration companies operating in British Columbia. Collectively, they represent 283 exploration projects across the province.

Executive summary

The mining and metals exploration industry remained a significant economic contributor in BC, with survey respondents, ranging from prospectors to publicly traded mineral-producing companies, reporting a total of $552m in exploration spend. The exploration sector employed a total of 4,143 workers in 2024, representing a 10% year-over-year increase from 3,779 workers in 2023.

Exploration spending in BC decreased for the second consecutive year, while many other provinces in Canada reported an increase in exploration spending

In 2024, exploration spending in BC experienced a second consecutive year of decline. This aligns with global trends, but stands in contrast to trends in several other provinces, which saw increases in exploration spending.

The gradual decrease in expenditure in BC from the record highs set in 2022 are indicative of the cyclical nature of the exploration industry, as flagship projects in BC that received significant funding in past years mature out of the exploration phase and move along the exploration lifecycle and approach operational readiness. In addition to project maturity, trends in the exploration industry reflect global macroeconomic conditions, such as access to financing and increasing costs driven by inflationary pressures. Drilling activity continued to decline in 2024, as metres drilled fell by 15% from 2023.

Ontario and Québec reinforced their positions as the dominant provinces with forecasted year-over-year increases in exploration spend, while Saskatchewan is estimated to see an increase of 11% to tie BC for third-highest spend in Canada. While differences across provinces can be attributed to different styles of mineralization and resources that are found in each province, policy considerations must be considered and further explored when examining BC's declining trend in exploration spend relative to other large provinces.

At the time of writing and analysis, while no official confirmation of tariffs imposed on Canadian imports by the United States government have been made, the looming threat of placing a 10% tariff on energy and energy resources will be of particular interest to the exploration industry in BC. Energy and energy resources are inclusive of critical minerals, coal, and uranium, all of which are instrumental to Canada's broader exploration sector.

04 Continued focus on critical minerals and a resurgence of spend in metallurgical coal soften the impact of declining spend in precious metals

Copper and gold remain primary targets of BC mineral exploration. However, despite record-high commodity prices, copper and gold exploration spending declined by 28% and 24%, respectively. This decline can be attributed to changing dynamics at opposite ends of the exploration cycle, as difficult financing conditions restricted grassroots spending, while large-scale deposits matured out of the exploration phase.

These decreases were tempered by the critical mineral and coal sectors, which received increased expenditure in 2024.

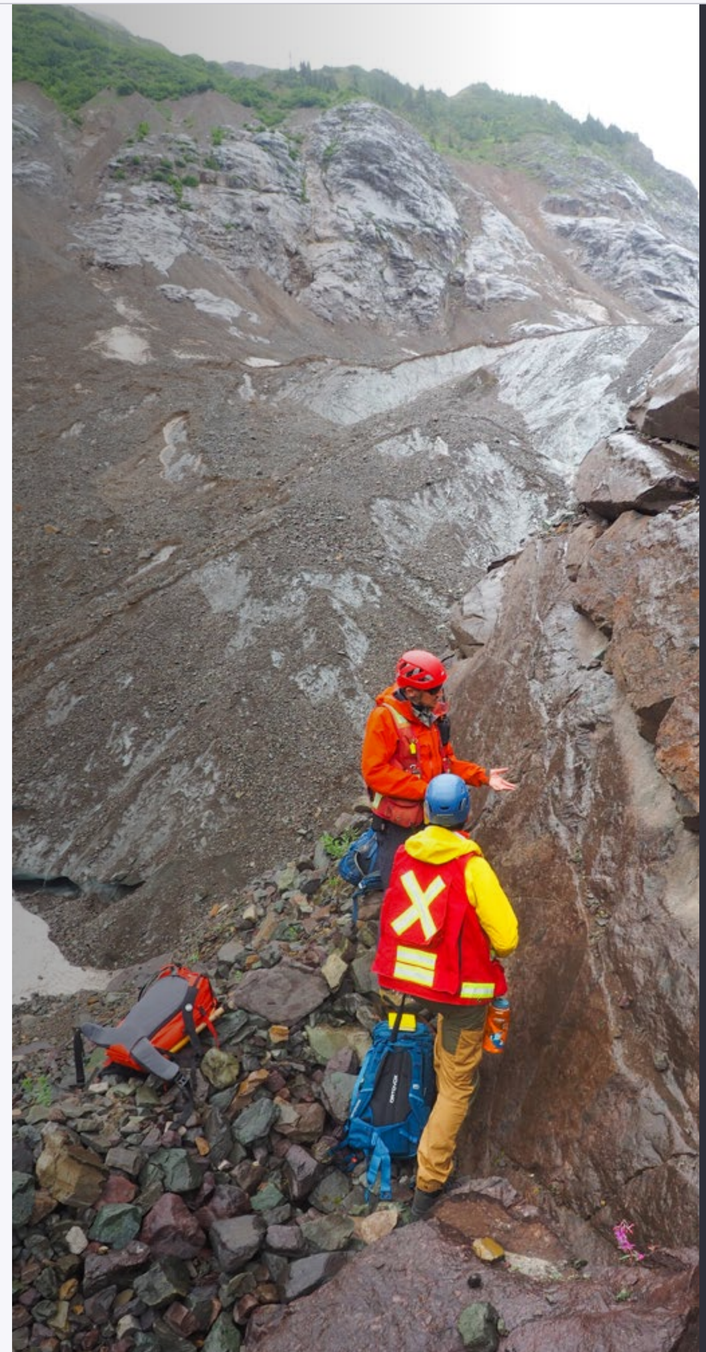
The critical minerals sector (excluding copper), which comprises strategically important minerals required to facilitate the transition to a greener, more sustainable economy, saw a 110% increase in year-over-year funding in 2024, increasing from $24m in 2023 to $49m in 2024, supported by the federal critical mineral exploration tax credit introduced in 2022.

Metallurgical coal received a 47% uptick in exploration spending, increasing from $26m in 2023 to $38m in 2024, which may be driven by recent acquisition activity in the market and a fresh injection of new capital into exploration projects. This is a substantial increase from the decade-lows BC experienced in 2022, where expenditure for metallurgical coal was only $12m.

High commodity prices empower mineral-producing companies to increase their share of the local exploration market as juniors continue to face difficulties raising funds

2024 marked a difficult year for junior exploration companies both globally and provincially compared to years past as difficult financial conditions persisted throughout the year. The junior exploration sector in British Columbia saw a 22% decrease in expenditure in 2024 compared to a 7% decrease globally. Exploration spend per project for juniors also saw a sharp decline, falling 35% from $2.17m per project in 2023 to $1.41m per project in 2024.

Conversely, mineral producers — empowered by strong commodity prices and revenue flows — increased their market share of the exploration industry in BC. Mineral producers recorded $228m of exploration spend in 2024, matching last year's expenditure. Most (78%) of this spend was directed toward later-stage projects, as strong commodity prices supported investments.



$552m

in exploration spending across the province for the year

14% ↙

decrease in provincial exploration spending from 2023 to 2024

15% ↙

decrease in total metres drilled from 2023 to 2024

05

Although mineral producers' expenditure remained flat year over year, the decline experienced by the junior exploration sector shifted the distribution of spend. This year represents a significant change in market dynamics in the provincial exploration industry, which has historically been dominated by the junior sector, as mineral producers increased their share for the second consecutive year, representing 41% of all exploration spend in the province, up from 36% one year ago.

Looking forward

While difficult financing conditions and a shift in project maturity slowed down reported exploration spend in 2024, continued demand for critical minerals and federal policy incentives may signal a turnaround for the sector in the future. BC has an opportunity to learn from other provincial policies and incentives to support the local exploration sector and continue to strengthen its position in the industry.

The demand for critical minerals and the persistent need for resources to facilitate the global decarbonization effort will result in the need for continuing exploration, as it is a fundamental step in creating the appropriate pathways to produce the metals required for future technologies to be successful.

Table 1 highlights key statistics and figures for 2024 across all regions in BC and shows changes relative to the 2023 survey findings.

Table 1: Exploration in BC summary statistics

REGIONAL CENTRE		**BC**	**Northwest** Smithers	**Northeast** Prince George	**North Central** Prince George	**Southwest** Vancouver	**South Central** Kamloops	**Southeast** Cranbrook
PROJECTS								
2024 Projects	#	283	91	2	41	32	75	42
2023 Projects	#	244	88	6	39	22	52	37
% Year-on-Year Change	%	16%	3%	-67%	5%	45%	44%	14%
Share of 2024	%	100%	32%	1%	14%	11%	27%	15%
EXPENDITURE								
2024 Expenditure	$m	$552	$348	$3	$77	$8	$68	$48
2023 Expenditure	$m	$643	$444	$3	$67	$10	$84	$36
% Year-on-Year Change	%	-14%	-22%	26%	15%	-17%	-18%	33%
Share of 2024	%	100%	63%	1%	14%	2%	12%	9%
DRILLING								
2024 Drilling	m	631,726	303,396	3,598	88,982	6,759	132,212	96,780
2023 Total Drilling	m	747,579	439,663	4,705	69,590	24,702	110,712	98,207
% Year-on-Year Change	%	-15%	-31%	-24%	28%	-73%	19%	-1%
Share of 2024	%		48%	1%	14%	1%	21%	15%

06 British Columbia's mineral and coal exploration industry

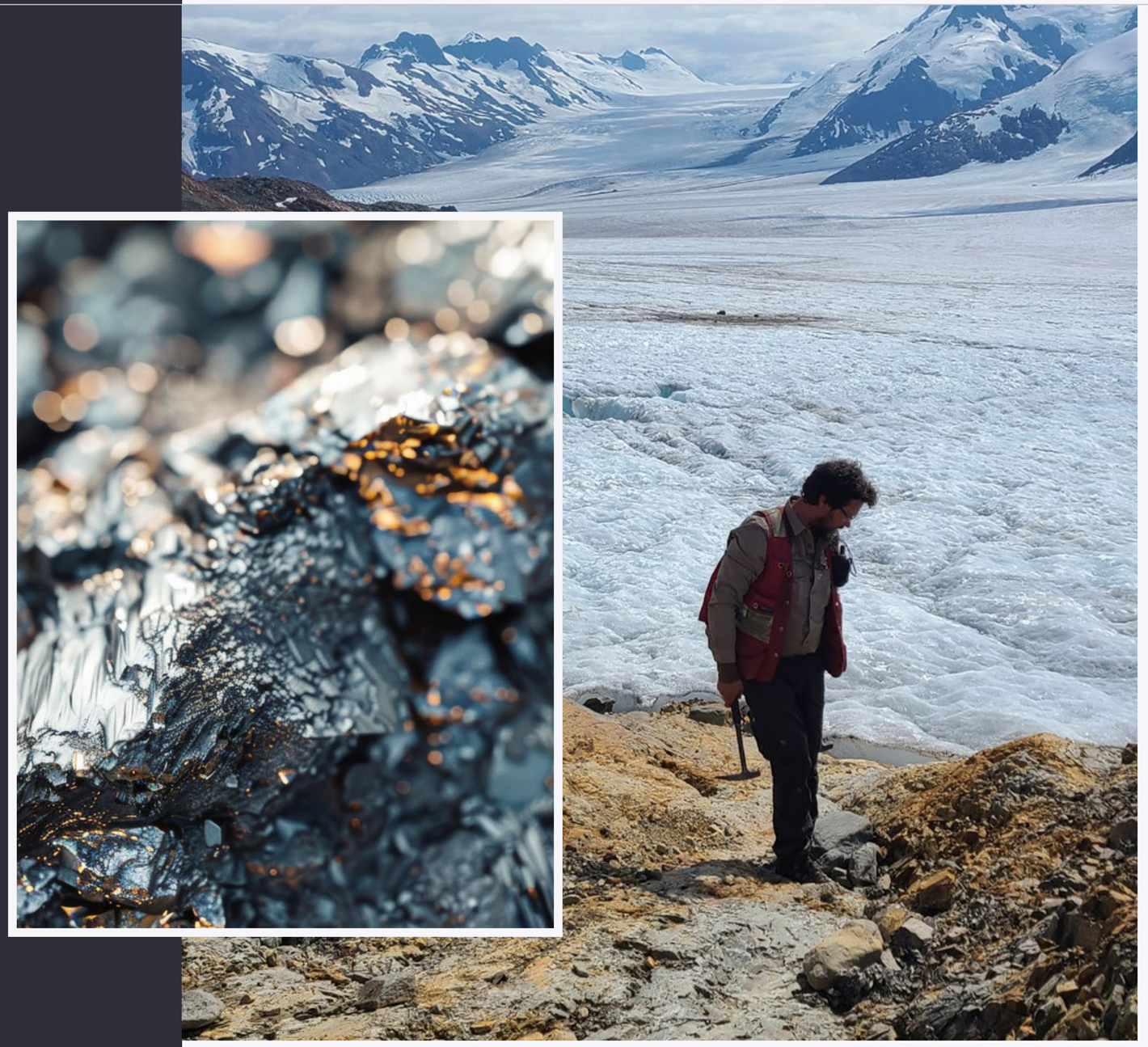
Mining and metals exploration spending in British Columbia totalled over $550m in 2024

Survey respondents reported a total of $552m invested into the exploration and evaluation of mineral deposits in British Columbia over the course of 2024. Of this total annual expenditure, $316m (57%) was invested directly into the local economy.

The exploration industry also provided a significant source of direct employment for British Columbians, with respondents reporting a total of 4,143 workers in 2024, representing a 10% increase from 3,779 workers in 2023.

While annual exploration expenditure in British Columbia in 2024 declined from 2023 levels, which is in line with global trends (3.3% decrease year over year globally)[1], several other Canadian provinces went against the trend and are forecasted to post year-over-year increases in exploration spend.

The companies surveyed range from grassroots, junior exploration companies to large-scale, publicly traded mineral-producing companies operating across the world. A robust exploration industry is foundational to supplying the critical minerals required to support the global transition towards greener, more sustainable practices globally. It is also fundamental for maintaining a flow of new projects and the source of new mine development opportunities.



[1] S&P Global Commodity Insights, CES 2024 Summary Report

08 British Columbia's mineral and coal exploration industry

Despite decreases, BC continues to play a key role in the national mineral exploration industry

09

British Columbia remains a significant contributor to the mineral exploration industry in Canada. Using data published by Natural Resources Canada (NRCan) for comparative purposes between provinces, British Columbia's contribution to national mineral exploration and deposit appraisal expenditure based on spending intentions is forecasted to decrease by 23%, from $680m in 2023 to $525m in 2024.

The Mineral Development Office of British Columbia survey, the basis of this report, shows a decrease of 14% from 2024 to 2023, compared to the 23% decrease NRCan forecasted. The differences between the survey findings in this report and the NRCan data are primarily due to survey size, timing of the surveys and the total number of respondents, as well as estimates relating to spending intentions, rather than actual spending figures.

Note that we expect a change in NRCan exploration expenditure for all jurisdictions once finalized spending values are considered. For the purposes of this report, $552m will be considered as BC exploration expenditure for 2024, except in instances where comparisons are being made to other provinces and territories.

Taking a closer look at spending intentions across Canada, the national exploration industry is dominated primarily by Ontario, Quebec, British Columbia, and Saskatchewan, which hold 27%, 24%, 12% and 12% of the national share, respectively. These four provinces collectively represent 75% of the national exploration spend and are key contributors to the broader Canadian economy. With opposing trends in exploration spend in BC and Saskatchewan, we are starting to see a shift in expenditure dynamics as Saskatchewan emerges as a dominant player.

$225m

critical metals exploration spending in 2024

$249m

gold exploration spending in 2024

$38m

metallurgical coal exploration spending in 2024

Differences in provincial policy may be driving a widening gap between British Columbia and other Canadian mineral exploration powerhouses

Exploration spend in BC decreased by 32% from 2022 to 2023 and is forecasted to decrease an additional 23% from 2023 to 2024 according to NRCan data. Meanwhile, exploration spend in Saskatchewan has seen the opposite effect, increasing by 33% from 2022 to 2023 and is expected to increase an additional 11% from 2023 to 2024.

These opposing trends have led to BC and Saskatchewan sharing equal portions of the Canadian exploration industry in 2024, with both provinces owning 12% of national expenditure. By contrast, in 2022, BC accounted for 22% of national spend while Saskatchewan accounted for only 8%.

While differences among exploration expenditure across provinces can be attributed to the style of mineralization and resources that are found in each province — for example, Saskatchewan's increase in exploration activity can be attributed to its abundance of potash and uranium — policy considerations should be explored further to determine whether provincial policy strategies and incentives are re-directing investment into more favourable jurisdictions.

Saskatchewan has implemented a variety of provincial funding initiatives, namely the Targeted Mineral Exploration Incentive (TMEI), which provides grants equal to 25% of direct drilling costs (up to $150,000 and $50,000 for uranium) and increased its annual funding from $750,000 to $4m.[2] With increasing uranium prices and growing demand for the mineral, coupled with the introduction of enhanced tax credits and incentives aimed at fostering exploration in Saskatchewan, the province is well positioned to continue its upward trajectory in the exploration sector.

Over the past three years, Ontario and Québec have also consistently experienced growth in exploration spending. In continuation of the Ontario Junior Exploration Program (OJEP) launched by the Ontario government in 2021, Ontario is investing $13m to assist 84 junior mining companies finance exploration projects in 2024 and 2025. This program grants junior mining companies up to $200,000 per exploration project.[3]

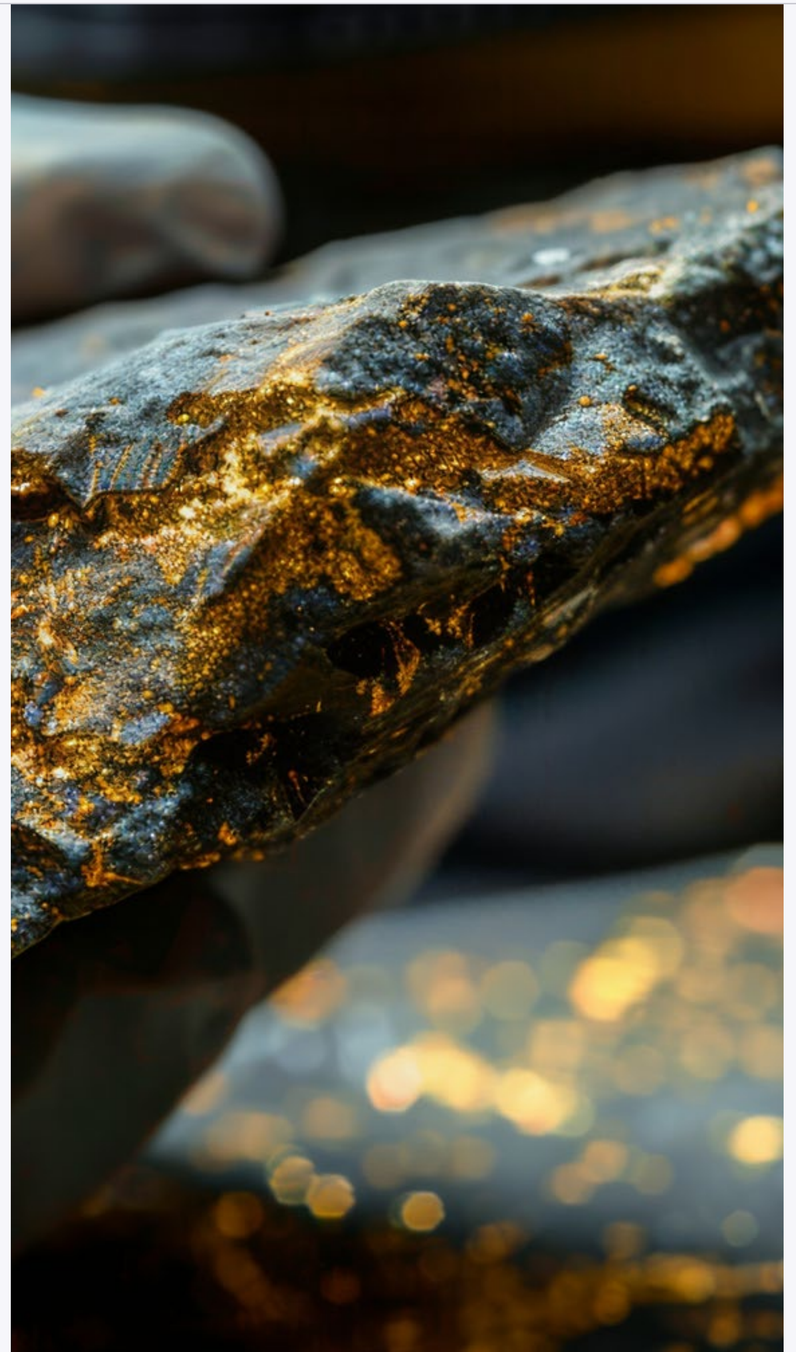
For additional context, the average expenditure by junior mining companies in British Columbia on early-stage exploration projects is roughly $500,000, demonstrating that a similar policy in terms of target market and magnitude may alleviate a significant portion of these costs and potentially stimulate growth in the sector.

Given the increases in expenditure in Ontario, Québec and Saskatchewan, an opportunity may exist for BC to go beyond its mineral exploration tax credit and explore other mineral exploration funding and incentive programs to support juniors with financing of new and existing projects. Difficult policy conditions surrounding land access, environmental regulation and permitting delays associated with exploration, along with expected changes to the mineral tenure regime, have added to the challenges facing BC's exploration industry. According to data provided by the Mining Association of British Columbia, there are approximately $38b of economic opportunities in the pipeline awaiting investment decisions or being sidelined due to the aforementioned challenges. Lengthy timelines and uncertainty around regulations may lead to project abandonment or lost investment funding.

Exploration expenditure intentions are varied across the rest of Canada, with the largest increase expected in Alberta, a 73% year-over-year increase. Alberta, while known primarily for oil and gas, has seen significant growth and investment over the past few years in critical mineral exploration, specifically lithium, a key component of batteries. Part of this uptick may be attributed to essential enabling regulations and advancing technologies in the extraction of brine-hosted minerals — minerals, in particular lithium, that are extracted from saline groundwater, a byproduct of oil and gas operations.[4]

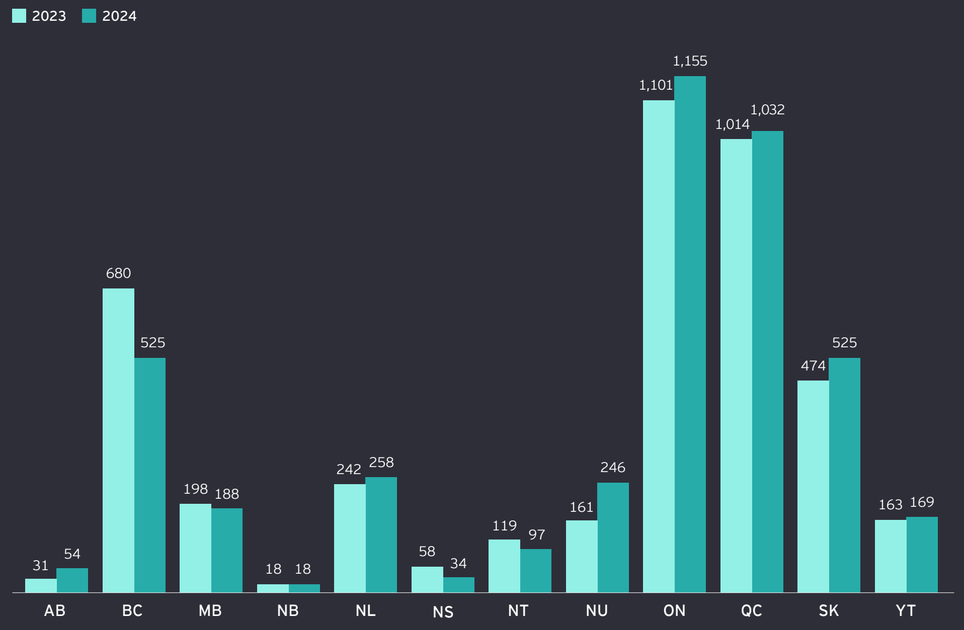
In addition to BC, Nova Scotia and the Northwest Territories are expected to post double-digit declines, decreasing 41% and 19%, respectively. Nova Scotia's forecasted decline comes after a 100% gain from 2022 to 2023, which was driven by a spike in precious metals exploration.

The other provinces and territories, apart from Nunavut, are expected to stay relatively flat, with small increases in terms of expenditure intentions. Nunavut is expected to increase its mineral exploration expenditure by 53%, from $161m in 2023 to $246m in 2024. This is largely driven by gold exploration, which accounts for the majority of the territory's spending.



[2] Government of Saskatchewan - Critical Minerals Strategy
[3] Government of Ontario - Ontario Junior Exploration Program Guidelines
[4] Government Of Alberta - Brine-hosted Minerals Development in Alberta

Figure 1: Exploration and deposit appraisal expenditures (2023) and revised spending intentions (2024) by province and territory (C$m)



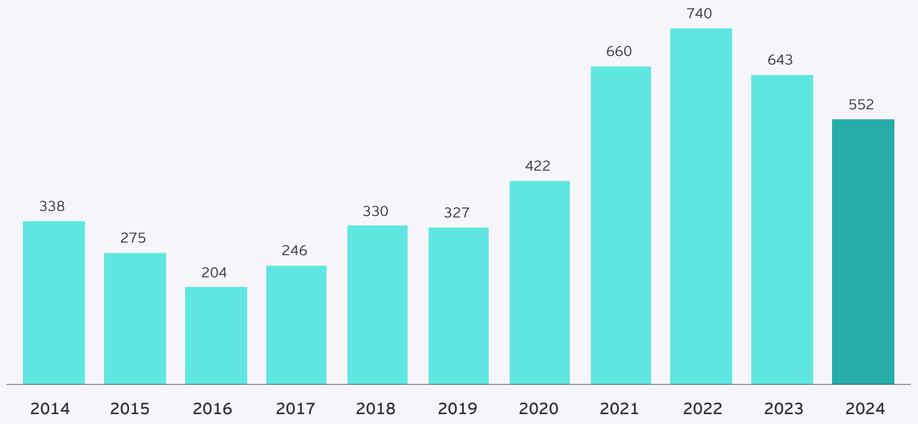
* Figures shown for 2024 are representative of spending intentions as surveyed by NRCan as of February 2023 and may not represent true spending value.

Source: Natural Resources Canada, from the federal-provincial/territorial Survey of Mineral Exploration, Deposit Appraisal and Mine Complex Development Expenditures.

Provincial exploration spending down for second consecutive year, in line with global trends

Results from the 2024 BC Exploration Survey show a 14% decrease in exploration spending for the year, down to $552m in 2024 from $643m in 2023. This marks a continuation of the trend in declining exploration budgets seen in 2023, when annual exploration spending in the province fell by 13% from a record-setting $740m in 2022 to $643m in 2023, and a further reflection of global trends. Global exploration expenditure is estimated to decrease by 3% annually – from $12.9b in 2023 to $12.5b in 2024.[5]

Figure 2: Annual exploration expenditure in BC, 2014–24 (C$m)



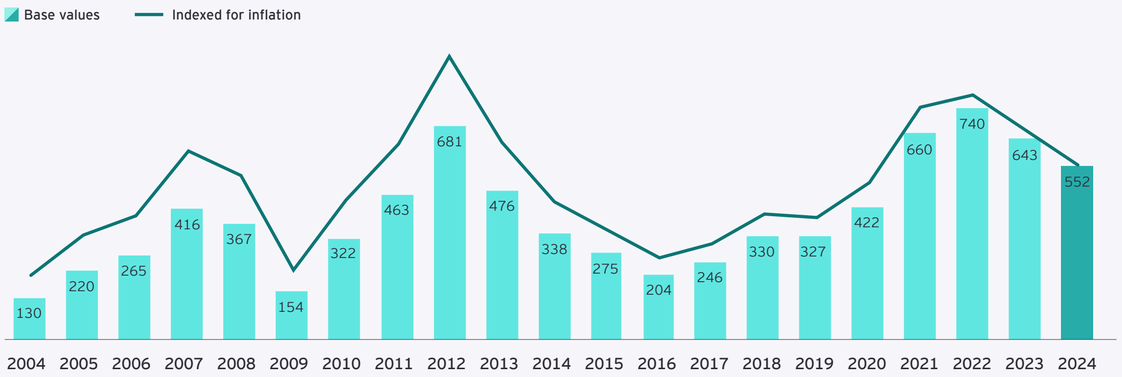
[5] S&P Global Commodity Insights, CES 2024 Summary Report

While the conditions hindering the global exploration market — such as tightening financial conditions, lack of focus on generative, grassroots projects and higher costs of inputs due to inflationary pressures — apply to British Columbia, local factors relating to the maturity of the industry are worth noting.

Several notable exploration projects in British Columbia are beginning to mature toward operational readiness and, as such, are shifting focus away from exploration and towards infrastructure development. The 10 largest exploration projects by expenditure in 2024 totalled $259m, while the 10 largest projects by expenditure in 2023 totalled $343m. This difference of nearly $100m year over year demonstrates the natural progression of flagship projects, which in previous years would represent a significant portion of annual spend, maturing away from exploration and redirecting resources towards aspects such as infrastructure development.

Exploration spending in BC, and to a large extent globally, follows a cyclical pattern that often mirrors macroeconomic trends. While this decrease in exploration is the second consecutive year-over-year decline seen in the province, a trend that has not been observed since 2013-15, analyzing longer-term trends demonstrates this cyclical nature and the time-series effects of maturing projects, as well as a change in economic focus and shifting financial conditions, such as rising global interest rates affecting junior companies' ability to raise funding.

Figure 3: Annual exploration expenditure in BC indexed for inflation, 2004–24 (C$m)



As previously stated, the allocation of dollars across exploration projects experienced a broader distribution in 2024, with the number of projects increasing by 16% from 244 projects in 2023 to 283 projects in 2024. This redistribution of total spend across a greater number of projects signals improved robustness in the sector, as it reduces the dependence on select large-scale projects to keep the exploration sector in BC buoyant. This increase in projects marks a 23% increase from 2022, where exploration spend in the province reached a record-setting $740m. This is reflected in the average spend per project, which declined 26% since 2023 from $2.64m per project to $1.95m in 2024 as projects matured out of the exploration stage.

Figure 4: Average expenditure per exploration project across BC, 2021–24 (C$m per project)

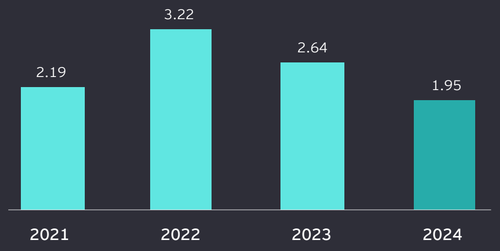
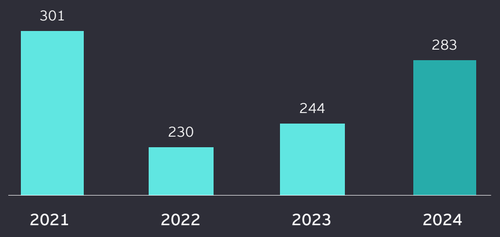


Figure 5: Number of annual exploration projects across BC, 2021–24



Gold and copper exploration fall despite continued strong commodity prices, while other BC minerals such as coal, industrial minerals and nickel soften the impact

Further in line with global trends across the exploration industry, BC's copper and gold exploration industries faced downturns in 2024. Despite record-high prices for both commodities, gold and copper exploration expenditure fell by 24% and 28%, respectively. This notable decline in the two largest sectors of BC's exploration industry was tempered slightly by upticks in silver, coal, industrial and other critical metals exploration across the province.

The silver sector saw a 72% increase in exploration expenditure in 2024, increasing by $12m from $17m in 2023 to $30m in 2024. It's worth noting that reclassifying the primary commodity of significant projects in the precious metals sector from gold to silver may have contributed significantly to this increase.

The steelmaking coal sector saw a second consecutive year of increased exploration spending in 2024, rising by 47% from $26m in 2023 to $38m in 2024. This represents a 206% increase from 2022, when the industry saw a record-setting low of $12m in exploration spending.

Industrial minerals, namely gypsum and limestone, attracted a continuation of the interest shown in 2023, with 2024 marking another year of consecutive increases in exploration spending. Spending for industrial minerals increased 58% from $6m in 2023 to $10m in 2024, representing an $8m increase from 2022 levels.

Critical metals of specific interest to the Canadian economy — excluding copper, which is analyzed separately in this report — due to their importance in modern technology applications and supporting the energy transition, received 110% more exploration funding in 2024. These critical metals received $49m in 2024 compared to $24m in 2023, demonstrating a continued interest in securing a reliable supply for essential raw material inputs in the country.

2024 marked the first time in three years that the market share of exploration funding held by sectors other than copper or gold exceeded 11%, with this proportion nearly doubling from 11% in 2023 to 23% in 2024.

Influences of fiscal policy relevant to this sector are worth noting, as 2024 was the second full year of the federal Critical Mineral Exploration Tax Credit, which provides a 30% tax credit to investors in companies exploring critical minerals.

Nickel, zinc and copper are among the 16 minerals included on this list that are of specific relevance to British Columbia and may help explain the distribution of exploration funding away from gold towards the critical mineral sectors.

It is worth noting that exploration for copper and gold is also influenced by BC's geological makeup, which is prospective for porphyry deposits that are typically dominated by copper mineralization, but can also contain significant gold, silver and molybdenum.

The primary commodity reported from BC porphyry deposits can vary between gold, copper, silver and molybdenum, depending on the grade and commodity price due to its specific geological characteristics, resulting in reporting discrepancies year over year. We explore further analysis by deposit type later in this report.

Figure 6: Annual exploration expenditure by commodity, 2022–24 (C$m)

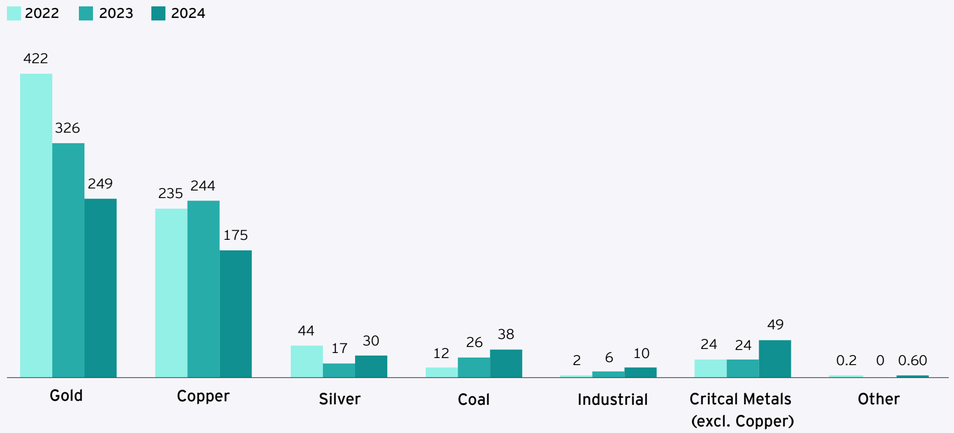
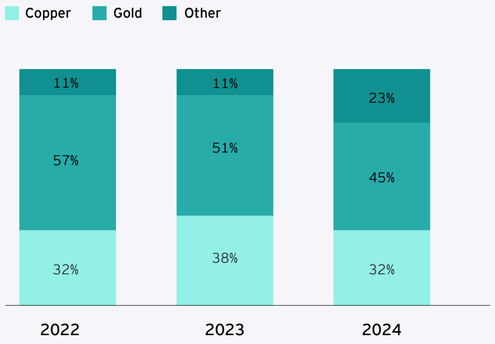


Figure 7: Share of total annual exploration spend by year, 2022–24



28% ↙

decrease in copper exploration sector spending in 2024

110% ↗

increase in critical metals (excluding copper) sector spending in 2024

24% ↙

decrease in gold exploration sector spending in 2024

Declines in copper spending tempered by a strong year for battery metals

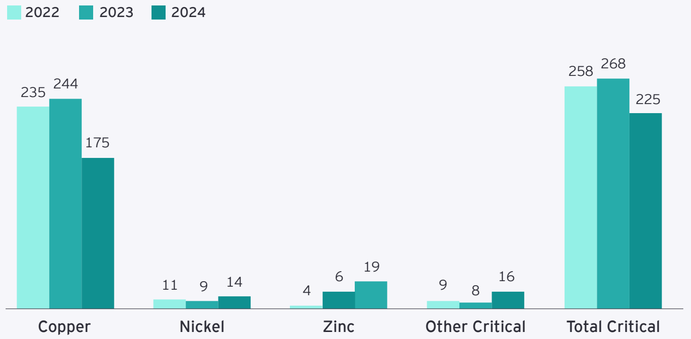
The following section of this report is dedicated to highlighting metals that have been identified as critical minerals by the Canadian and US governments as part of a Joint Action Plan on Minerals Collaboration. This plan, established in 2020 and supported by the previously mentioned tax incentive among other policies, is an effort to develop a more robust and self-reliant North American supply of critical minerals that play an integral role in the transition to a cleaner, more sustainable economy.

This list includes metals that show exploration potential in BC – such as copper, molybdenum, zinc, nickel, rare earth elements and magnesium – creating an opportunity for British Columbia to be a key player in the global green transition.

Some end-use applications of critical metals include **renewable energy technologies** such as copper, rare earth elements and nickel, **electronics and communication** metals like tantalum, **industrial applications** including zinc and molybdenum, and **infrastructure** such as magnesium.

Exploration spending in critical metals, including copper, in BC decreased in 2024 by 16% from $268m in 2023 to $225m in 2024. This decline of $43m can largely be attributed to the $69m decrease in copper exploration spending, but it's offset by increases in nickel, zinc and other critical metals exploration.

Figure 8: Exploration spend by critical metal, 2022–24 (C$m)



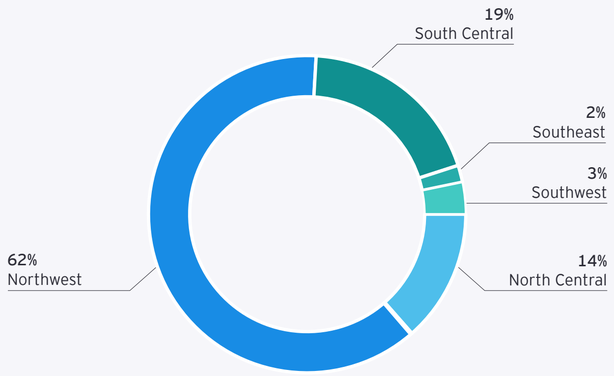
With regards to nickel, a critical component in batteries for electric vehicles and energy storage systems and zinc, the province has seen significant uptick in exploration investment particularly for flagship projects in the North Central region.

Nickel exploration expenditure in BC increased by 50% in 2024. This increase goes against the global trend, which saw a 30% decrease in nickel exploration year over year due to oversupply, and marks a reversal in the global trend seen in nickel exploration expenditure since 2020.[6]

Zinc exploration spending also saw a significant uptick in 2024, as exploration expenditure increased 209% from $6m in 2023 to $19m in 2024. This marks a 971% increase over the course of four years, after zinc exploration plummeted to a record low of $2m in 2020.

The decrease in copper spending provincially goes against the global trend in copper exploration expenditure, which has seen a modest 2% year-over-year increase driven by increases in Latin America, the US and other provinces in Canada.[7] This local decline has occurred despite strong commodity prices due to boosted copper demand and limited supply.

Figure 9: Regional contribution to critical mineral exploration expenditure, 2024



A potential explanation for this decline may be the maturity of copper exploration projects in British Columbia. Flagship projects that have historically represented a significant portion of copper exploration spend are approaching operational readiness and are therefore being removed from the exploration expenditure profile.

The 10 largest copper exploration projects by expenditure in 2023 totalled $201m, whereas the 10 largest projects by expenditure in 2024 totalled $143m. These large projects can be assumed to be shifting funding focus away from exploration and geological refinement and towards economic feasibility and infrastructure development.

Additionally, as mentioned in the previous section, copper in British Columbia occurs predominantly in porphyry deposits, which typically contain a combination of copper and either gold, silver or molybdenum. These polymetallic deposits and other copper primary deposit types will be key to securing the province's place in the push to a greener economy. It is worth noting that the geological characteristics of BC porphyry deposits mean that the primary commodity reported can change between gold and copper depending on grade and commodity price, and can thus create variability in what is reported year over year.

Notable critical metals projects

Northwest

Galore Creek – Galore Creek Mining Corp. (copper)
Schaft Creek – Teck Resources Limited (copper)
Thorn Project – Brixton Metals Corporation (copper)
Davidson Molybdenum Deposit – Moon River Moly Ltd. (molybdenum)
Kitsault – New Moly LLC. (Molybdenum)

North Central

Cirque – Cirque Operating Corporation (zinc)
Aley – Taseko Mines Limited (niobium)
Baptiste Nickel project – FPX Nickel Corp. (nickel)
CAP – Apex Critical Metals Corp. (rare earth elements)

South Central

New Afton – New Gold Inc. (copper)
Blue River – Capacitor Metals Corp. (tantalum, niobium)
MPD – Kodiak Copper Corp. (copper)

Southeast

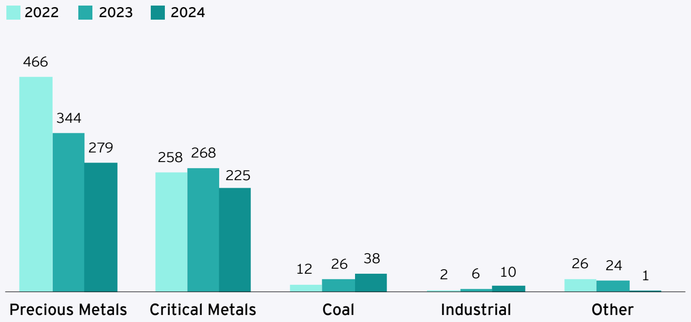
Cranbrook Properties – PJX Resources Inc. (zinc)

[6] S&P Global Commodity Insights, CES 2024 Summary Report
[7] S&P Global Commodity Insights, CES 2024 Summary Report

Provincial exploration spending for gold decreased despite record-setting prices in 2024

The precious metals sector — gold and silver — continued a downward trend in exploration expenditure from the previous record high seen in 2022, as expenditure declined 19% from $344m in 2023 to $279m in 2024. This represents a 40% decrease from the highs seen in 2022 and 2021, when precious metals exploration spending totalled $466m and $467m, respectively.

Figure 10: Spending by mineral type, 2022–24 (C$m)



Despite an unprecedented high gold price throughout the year — entering the year at $2,074/oz and climbing to $2,783/oz in October — exploration budgets for gold remained constricted as spending in the sector decreased by 24%, from $326m in 2023 to $249m in 2024. This decrease is directionally in line with global trends, which saw gold exploration decline by 7% year on year in 2024, largely driven by decreases in spending by junior exploration companies.[8]

By contrast, silver exploration, for which commodity prices followed a similar pattern — starting the year at $23/oz and rising to $34/oz in October — saw a significant uptick as exploration spending in the province increased by 72% from $17m in 2023 to $30m in 2024.

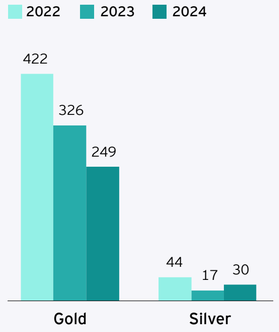
It is worth noting, as previously described, that the primary commodity reported from porphyry deposit exploration, which is the dominant project type in British Columbia, is dependent on grade and market price and may differ year over year among gold, copper, silver and molybdenum.

While the Northwest continues to dominate the gold exploration sector, accounting for 70% of all gold exploration expenditure in the province, year over year spending in 2024 decreased by 24%, from $230m to $175m in the region.

The Northwest is home to some of the largest gold exploration projects in the province and, as such, is expected to see some significant projects mature out of exploration, which may explain the downturn in spending.

Other notable changes occurred in the South Central and North Central regions. In the South Central region, spending fell 48%, from $48m in 2023 to $25m in 2024. In the North Central region, spending increased by 19%, to $47m.

Figure 11: Gold and silver exploration expenditure, 2022–24 (C$m)



19% ↙

decrease in precious metals exploration sector spending

72% ↗

increase in silver exploration expenditure

[8] S&P Global Commodity Insights, CES 2024 Summary Report

Notable precious metals projects within the province

Northwest

Eskay Creek – Skeena Resources Ltd. (gold)
Kitsault Valley – Dolly Varden Silver Corp. (silver)
Iskut – SnipGold Corp. (gold)
Scottie Gold Mine – Scottie Resources Corp. (gold)
Ranch – Thesis Gold Inc. (gold)

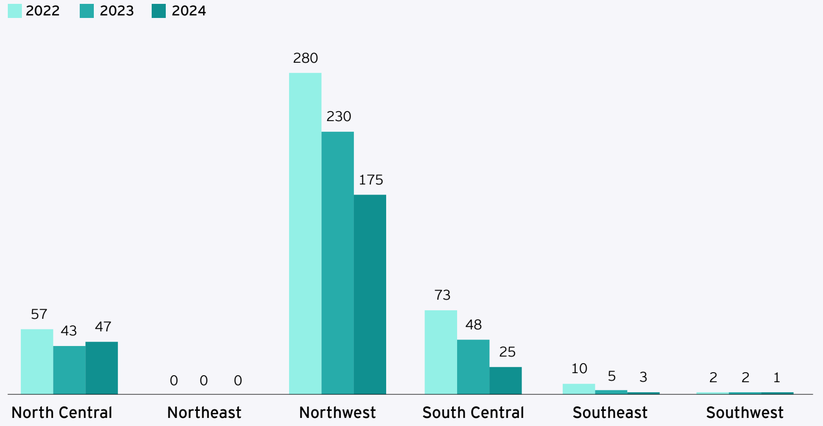
North Central

3T's – Independence Gold Corp (gold)
Kemess North – AuRico Metals Inc. (gold)
Lawyers (Deposits) – Thesis Gold Inc. (gold)

South Central

Bralorne – Talisker Resources Ltd. (gold)
Treasure Mountain North – New Destiny Mining Corp. (silver)
Shovelnose – Westhaven Gold Corp. (gold)
Spanish Mountain – Spanish Mountain Gold Ltd. (gold)

Figure 12: Gold exploration expenditure by region, 2022–24 (C$m)



Exploration spending for metallurgical coal in BC continues its resurgence from the record lows of 2022

Expenditure in metallurgical coal exploration posted another double-digit gain in 2024, up 47% to $38m after experiencing a 109% increase in 2023. This year marks the second consecutive year that coal exploration has increased in BC. Coal exploration has been on an upward trajectory after setting decade lows in 2022, when exploration spend was only $12m. Since then, it has more than tripled, to $38m, representing a 206% increase in the last two years.

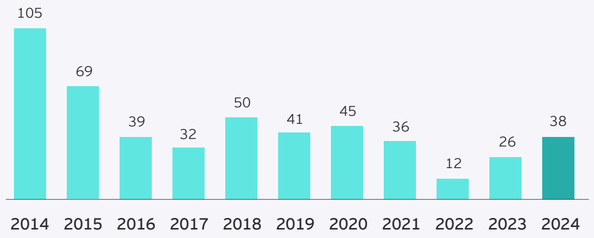
Part of this uptick in coal exploration spend may be attributed to the recent transaction of one of Canada's industry majors divesting of its steelmaking coal business to a global diversified miner. Increases in exploration spend often follow an acquisition, as the new owner allocates additional capital to exploration budgets. This transaction represents a major shift for the coal mining industry in BC as one of Canada's largest players exits entirely from the coal mining business.

On the global scale, the metallurgical coal market is expected to grow at a compound annual growth rate of 2.6% during the period from 2024 to 2032. This is primarily driven by global infrastructure developments and significant urbanization in countries like China and India.

All coal projects in British Columbia are metallurgical coal projects. Metallurgical coal is a key component in the steelmaking process. Metallurgical coal is also referred to as coking coal.

The Southeast region of BC continues to be the hub for coal exploration, representing 80% of the province's total. The Southeast also experienced the largest year-over-year gain, increasing 53% from $20m in 2023 to $30m in 2024.

Figure 13: Annual coal exploration expenditure, 2014-24 (C$m)



$38m

coal exploration total spending in 2024

47% ↗

increase in coal exploration spending from 2023

[9] Straits Research, Metallurgical Coal Market Size, Growth & Demand by 2032

Other regions in BC stayed relatively flat except for the Northwest region, which saw a moderate 37% increase in spending from 2023 to 2024.

Figure 14: Regional contribution to coal exploration expenditure, 2024

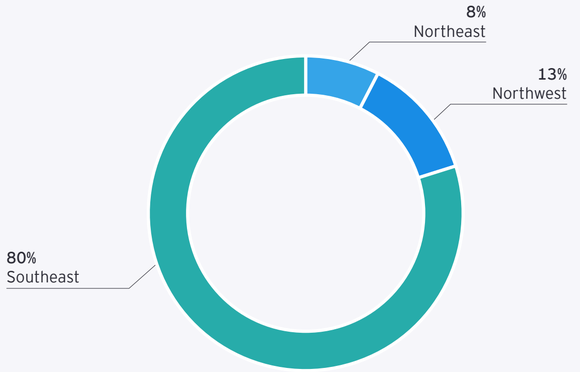
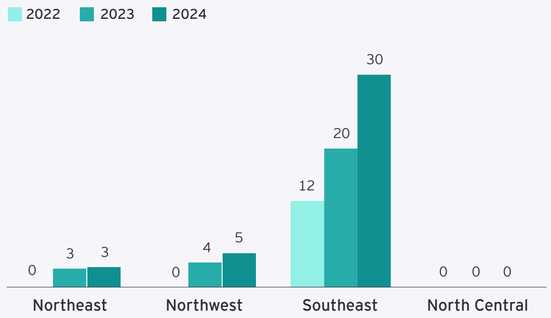


Figure 15: Annual coal exploration expenditure by region, 2022–24 (C$m)



The Northwest region continues to maintain the majority share of exploration expenditure in BC

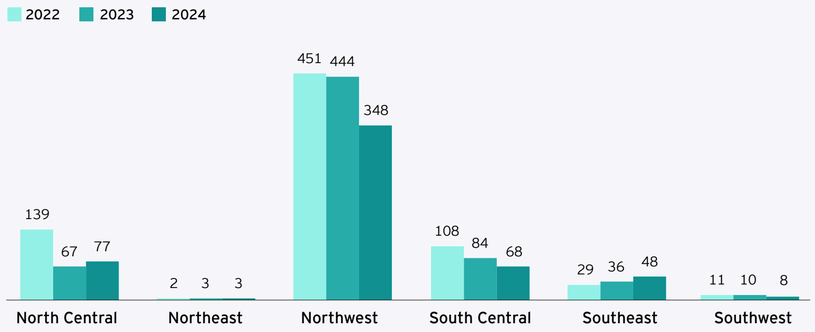
The trend of the Northwest region seeing the greatest concentration of exploration spend persisted in 2024, albeit to a lesser extent than in years past. The region accounted for 63% of all exploration spending in 2024, down from 69% of all exploration spend in 2023, and represents the largest year-over-year decline across all regions. This decline is to be expected given the shift toward more mature assets and subsequent decreases in copper and gold exploration spend.

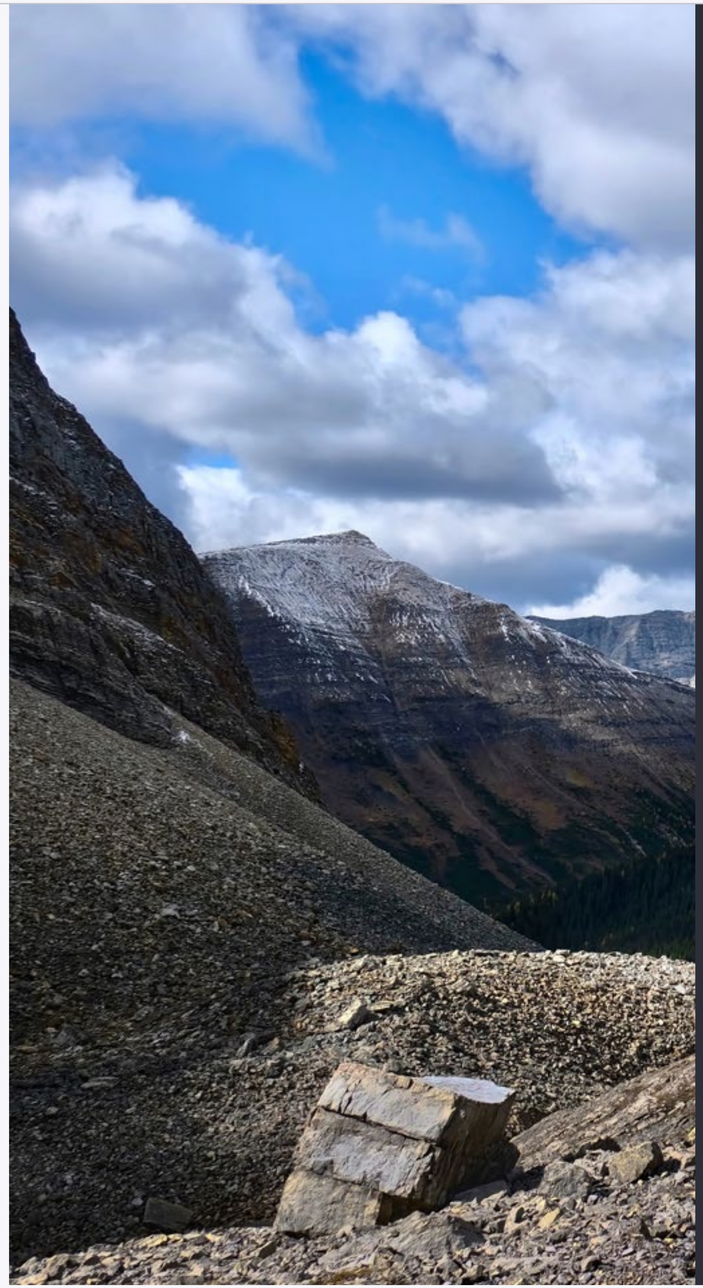
The Southeast region recorded its second consecutive year of growth in exploration spend, increasing 33% from $36m in 2023 to $48m in 2024. As previously mentioned, the Southeast region, which is home to 80% of the province's coal exploration, experienced a 47% increase year over year, driven primarily by the metallurgical coal sector.

The South Central and Southwest regions recorded double-digit decreases year over year of 18% and 17%, respectively, in line with the broader provincial exploration trend.

The North Central region saw a moderate increase in its share of provincial exploration spend, posting a 15% increase year over year. This increase can be attributed to the increase in gold exploration expenditure in the area, which is up 9%, from $43m in 2023 to $47m in 2024.

Figure 16: Annual expenditure by region, 2022–24 (C$m)



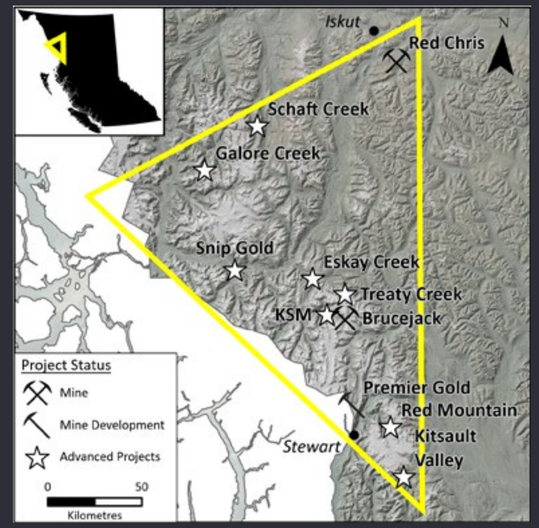


The Northwest region, home to the informal Golden Triangle, continues to attract significant interest from both local companies and major international producers.

Since prospectors first arrived in the late 19th century, over 150 mines have been operational in the region due to its abundance of gold, silver and copper deposits. To this day, it holds roughly 70% of the province's total gold and copper exploration expenditure.

The region serves as the home of the projects with the largest exploration spend in the province, namely the Eskay Creek project operated by Skeena Resources Limited, the Galore Creek Project operated by Galore Creek Mining Corporation and Kitsault Valley operated by the Dolly Varden Silver Corporation.

Figure 17: BC's Golden Triangle



To further understand these trends in spending, project types were analyzed across the province. Precious metal projects – containing either gold or silver or both – received 51% of all spending in 2024.

Although this year marks the third consecutive year precious metal exploration projects in BC have declined, exploration growth in silver saw renewed interest, increasing 72% year over year, softening the blow to the precious metal sector. Silver now makes up 5% of the province's exploration sector, up from 3% one year ago.

Overall, spending on precious metal exploration projects in BC remains robust, and given the industry's natural cyclicality, fluctuations are to be expected in line with global supply and demand.

While porphyry deposits (Cu-Mo, Cu-Au-Ag) declined 11%, from $279m in 2023 to $247m in 2024, they still represented 45% of all exploration spend in 2024, which is consistent with previous year's 43% share.

Precious metal and porphyry deposit projects represent 82% of total exploration spend in BC. These projects are predominantly in the Northwest region, which accounts for 67% and 80% of total spend for porphyry and precious metal projects, respectively.

Figure 18: Regional contribution to total exploration spend, 2024

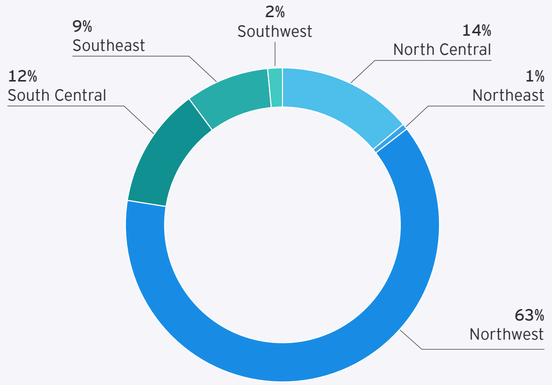


Figure 19: Total expenditure by project type, 2022–24 (C$m)

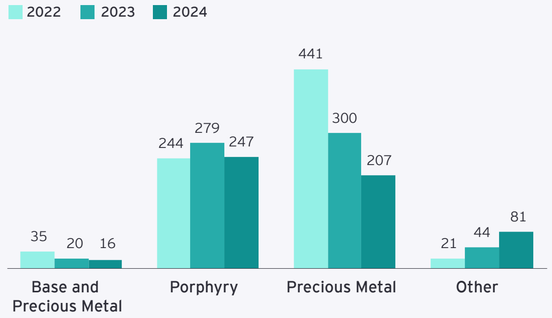
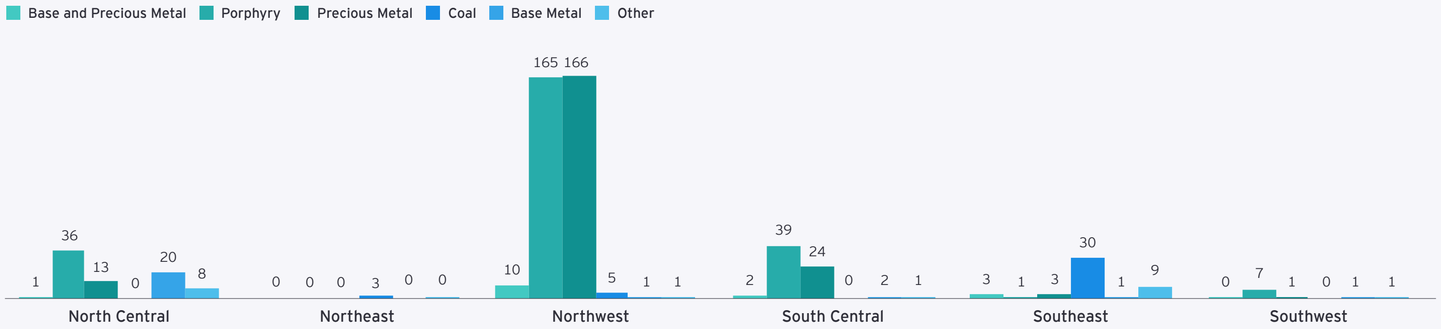


Figure 20: Distribution of expenditure by project type by area, 2024 (C$m)



Drilling activity decreases again as focus shifts to more mature assets in the development lifecycle

Total metres drilled in the province decreased 15% year over year, from 747,579 metres in 2023 to 631,726 metres in 2024. This marks the third consecutive year of declining drilling activity in the province, which corresponds with the observed reduction in exploration spending and a focus on more mature assets in the development lifecycle.

Consistent with exploration spending trends, drilling was down across all commodities except for silver, coal and "other." Silver posted the largest individual gain across commodities, increasing 19% year over year from 48,000 metres drilled in 2023 to 57,000 metres drilled in 2024.

Drilling in coal remained relatively flat year over year after posting a 228% gain in 2023. Drilling in coal remains at elevated levels as the Southeast region continues to increase its exploration spend. Collectively, the "other" category of commodities, which consists of industrial minerals, nickel, other critical minerals and zinc, saw a 62% uptick in drilling year over year.

Copper and gold experienced the largest year-over-year decreases in metres drilled, with declines of 29% and 20%, respectively, corresponding with their spending trends.

Regionally, drilling was dominated by the Northwest region, representing 48% of all metres drilled across the province. However, in line with spending trends across the province and globally, drilling activity in the Northwest declined 31% year over year, from 440,000 metres drilled in 2023 to 303,000 in 2024.

Drilling activity in the Southwest experienced the largest decline, decreasing 73% year over year. Notable changes in the Southwest contributing to this decline include the discontinuation and closure of multiple exploration projects in 2024. The number of exploration projects in the Southwest dropped significantly from 22 in 2023 to 14 in 2024.

Figure 21: Total metres drilled by commodity, 2022–24 (,000 metres)

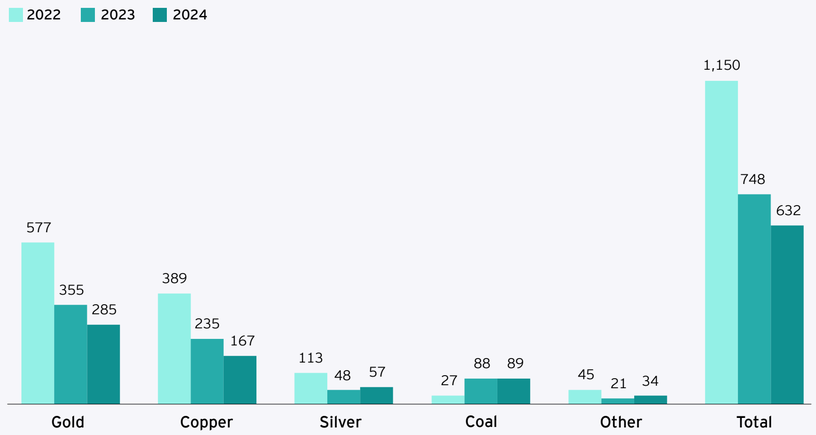
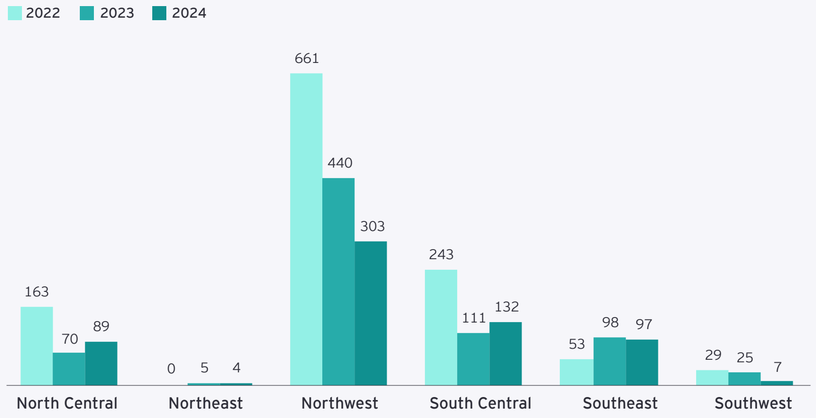


Figure 22: Total metres drilled by region, 2022–24 ('000 metres)

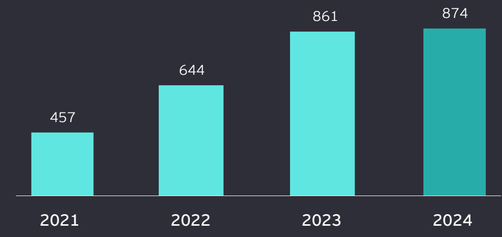


A metric of note to examine when looking at drilling expenditure over the years is the total exploration costs relative to metres drilled. Although this is not a true and accurate representation of the actual cost per metre drilled, it provides a directional and interesting perspective on how this metric has evolved over the last four years.

Total exploration costs in relation to metres drilled has soared 91%, from $457 of exploration spend/meter in 2021 to $874 in 2024.

Growing exploration costs, coupled with the shift toward more mature assets, has further disincentivized drilling and exploration across the province. Growing exploration costs relative to metres drilled can be attributed to a variety of factors, including inflationary pressures, financing challenges, consultation costs, permitting and legal fees, among many others.

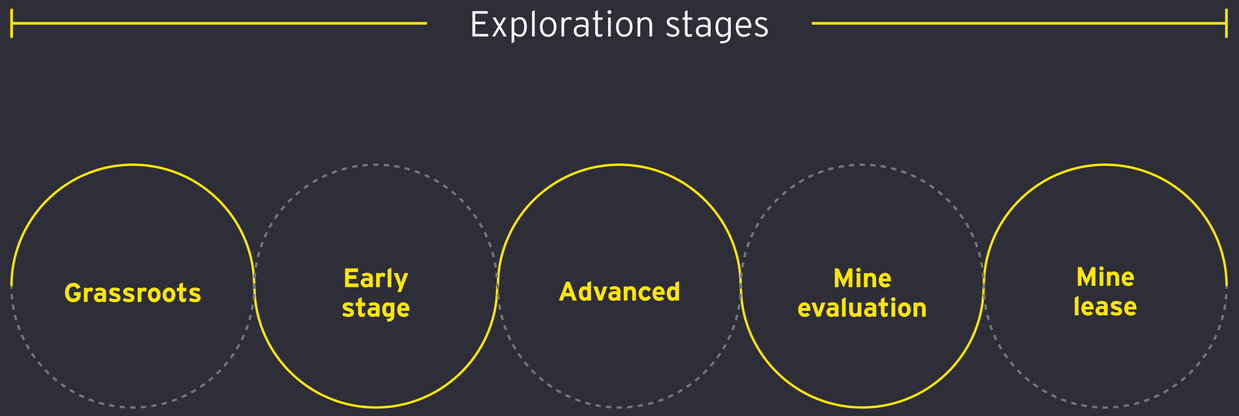
Figure 23: Exploration costs relative to metres drilled, 2021-24



Grassroots exploration in the province fell as strong commodity prices incentivized projects closer to operational readiness

The exploration lifecycle phase that attracts investment can indicate a company's risk tolerance. During times of volatility and uncertainty, junior exploration companies usually allocate capital to proven assets rather than riskier, early-stage projects, whereas larger companies aim to enhance the value of their current operations.

The exploration lifecycle consists of five core stages as demonstrated below, with risk decreasing from left to right:



In 2024, 32% of exploration in the province could be characterized as grassroots – prospecting, sampling, airborne geophysics – or early stage – geophysics, geochemistry, trenching and drilling. This is compared to 68% late-stage – advanced stage, mine evaluation – and/or mine lease exploration.

This ratio of spending between the identified stages further accentuates the shift in risk appetite among companies and investors over the years. As seen below, since 2022, there has been a gradual increase in later-stage projects and a shift away from earlier-stage projects, highlighting the desire for proven, more mature assets.

Earlier-stage expenditure – a combination of grassroots and early stage – decreased 22% year on year in 2024, from $228m in 2023 to $177m in 2024. This can be largely attributed to the dramatic decrease in grassroots funding seen in the province, which fell by 65% from $70m in 2023 to $25m in 2024.

This is in line with global exploration trends, where grassroots exploration held a record-low share of the global exploration budget.[10] While this shift can be partially attributed locally to the gradual progression of assets through the exploration cycle over time, it may also be seen as reflective of investors' risk appetite as they seek to extend resources at known deposits rather than take on the risks associated with newer discoveries.

Later-stage exploration – a combination of advanced, mine evaluation and mine lease spending stages – saw a less dramatic decrease of 9% year on year in 2024, as spending fell from $416m in 2023 to $374m in 2024. While advanced and mine lease exploration spending increased by 11% and 10%, respectively, mine evaluation spending – which held the largest share of exploration spend in 2023 – decreased by 23% in 2024.

[10] S&P Global Commodity Insights, CES 2024 Summary Report

Figure 24: Distribution of annual exploration expenditure by stage, 2020–24

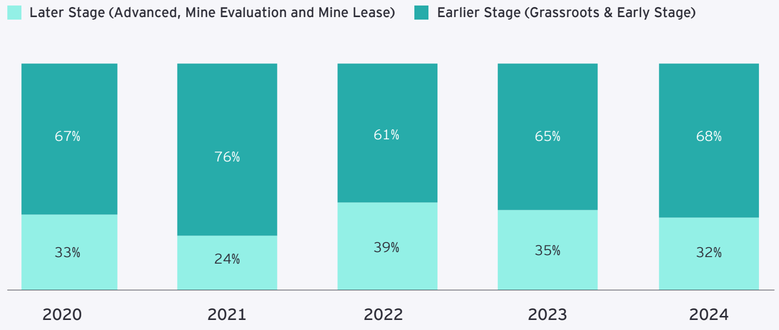
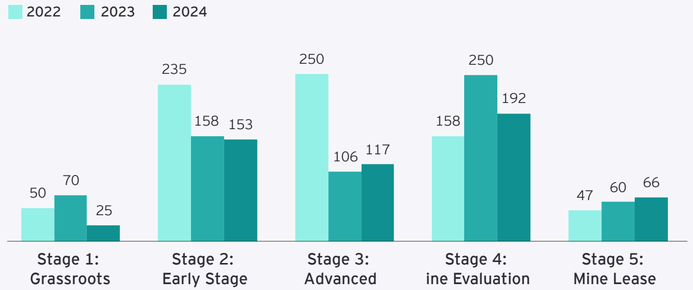


Figure 25: Exploration expenditure analysis by exploration stage (C$m), 2022–24



Lifecyle analysis at the commodity level provides further detail to the trends seen above.

Total copper exploration expenditure in BC fell by 28% in 2024, compared to a global year-over-year increase of 2%, while the total number of projects decreased by 12%. There was a significant decrease in funding for projects in the mine evaluation stage.

The mine evaluation stage – which had been the dominant stage for copper exploration funding – saw a $64m decrease in spending year over year, as major exploration projects in this stage matured out of exploration and toward operational readiness.

Gold exploration in the province declined by 24% in 2024, largely driven by a decrease in spending in the earlier stages of the exploration cycle. Grassroots and early-stage exploration spending decreased by 58% and 26%, respectively, lending further evidence to the trend of an industry shift away from grassroots due to systemic and macroeconomic factors.

4%

of total provincial exploration spend that went towards grassroots projects in 2024

Figure 26: Project lifecycle analysis by exploration stage (C$m), copper, 2022–24

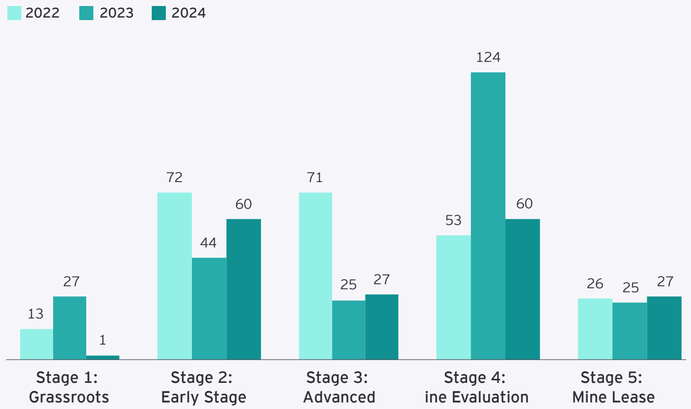
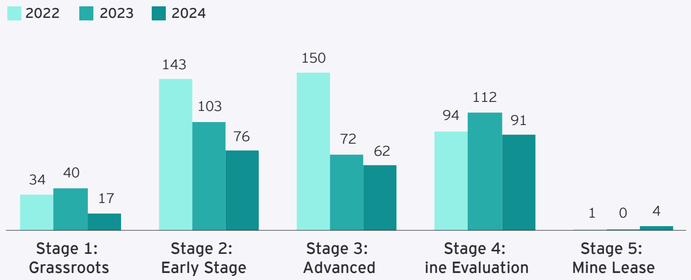
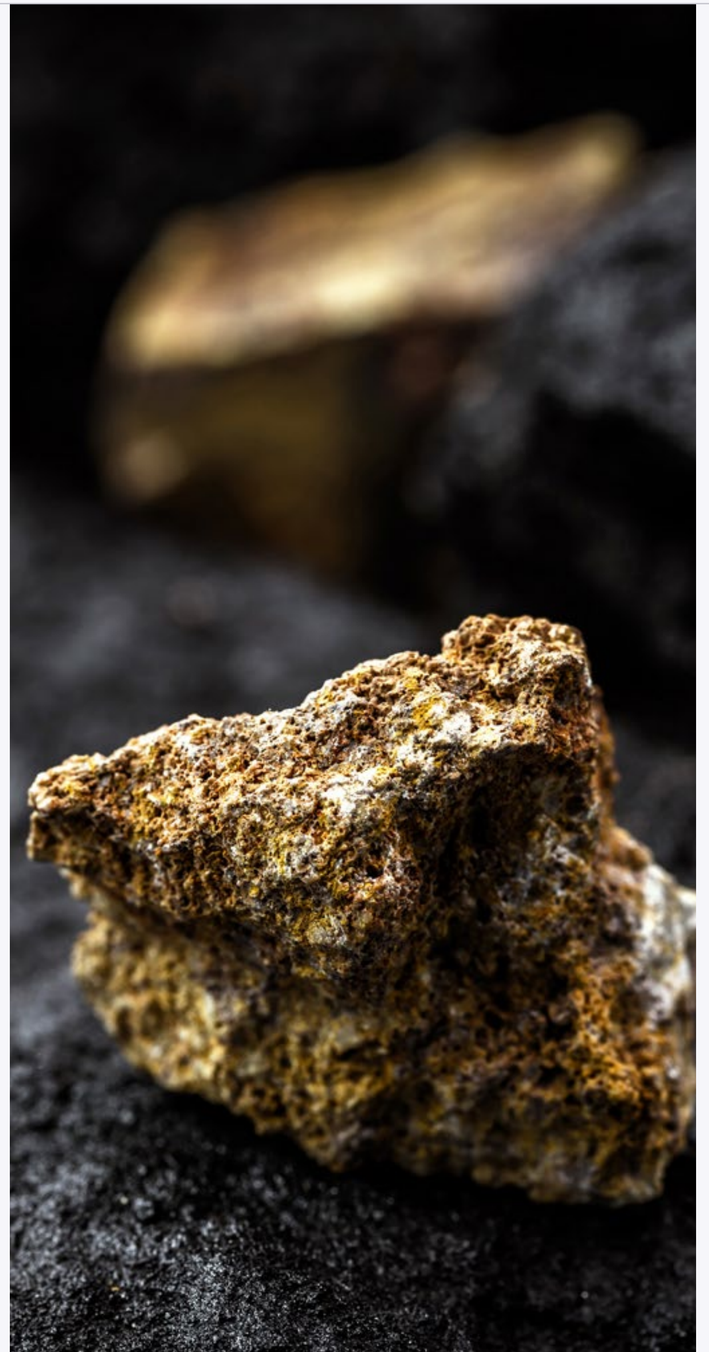


Figure 27: Project lifecycle analysis by exploration stage (C$m), gold, 2022–24





Junior exploration companies reported declines in spend while mineral producers reap the benefits of strong commodity prices

The junior exploration sector saw a second consecutive decline in expenditure in 2024 as difficult financing conditions persist, falling by 22% from $415m in 2023 to $324m in 2024, and a further 39% from spending levels seen in 2022.

Mineral producers, supported by strong operating cash flows from high commodity prices, continued their elevated level of exploration spend in the province, recording over $200m in exploration spend for the third consecutive year. Exploration spend for mineral producers increased 11% from 2022 levels and remained consistent with expenditure levels experienced in 2023. 2024 marks a continuation of the gradual shift of expenditure from junior exploration companies to mineral producers.

Exploration spending per project similarly declined sharply for juniors, falling 35% from $2.17m per project in 2023 to $1.41m in 2024, while mineral producers saw a moderate decrease of 2% on average spend on exploration projects.

At the commodity level, this shift in market dominance is particularly pronounced in the gold exploration sectors. In 2023, mineral producers accounted for only 5% of provincial exploration spend for gold, whereas in 2024 this market share rose to 24% as mineral producers increased spending by $43m, a 272% increase year on year from 2023, while taking advantage of higher commodity prices.

Despite a 38% decrease in exploration spending from juniors in the gold sector, juniors continue to dominate, with 76% of the provincial gold expenditure. However, if higher commodity prices and challenging financing conditions persist in 2025 and beyond, it is likely that mineral producers will capitalize on these conditions and continue to increase their market share.

The copper sector showed less dramatic shifts, as the dominant market share held by mineral producers in the sector fell moderately to 63% in 2024, as opposed to 70% in 2023. Both copper and gold sectors saw a second consecutive decline in aggregate spending from junior exploration companies, signalling difficulties in securing the funding required to facilitate grassroots and earlier exploration.

Figure 28: Total exploration expenditure by company size $Cm, 2022–24

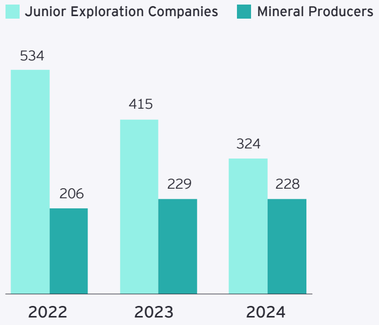
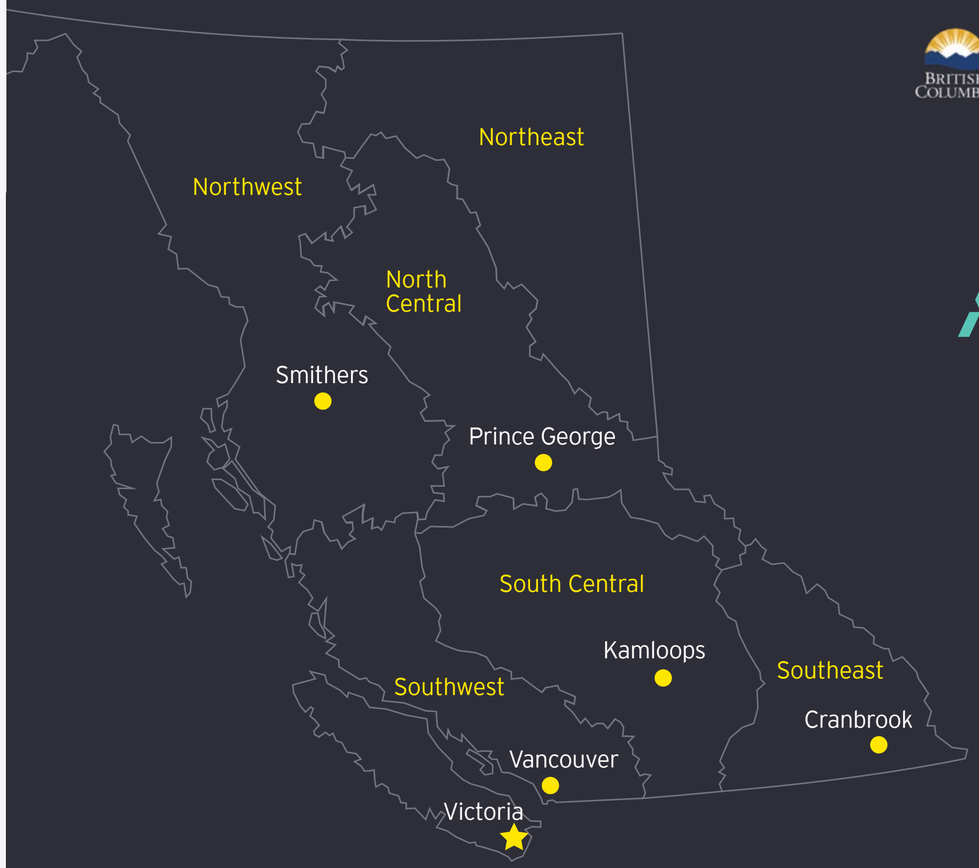


Figure 29: Average exploration spend per project $Cm, 2022–24

Figure 30: Exploration expenditure by company size, copper, 2022-24

Figure 31: Exploration expenditure by company size, gold, 2022-24

About the collaborators



Government of British Columbia's Ministry of Mining and Critical Minerals (MCM).

MCM is the provincial government Ministry responsible for overseeing mineral and coal exploration activity in BC. Ministry staff helped in the design of the survey and facilitated response generation. These expenditure data were either solicited directly from the companies or estimated by British Columbia Geological Survey (BCGS) Regional Geologists under the direction of its Mineral Development Office.

Association for Mineral Exploration (AME)

AME is the lead association for the mineral exploration and development industry based in BC. Established in 1912, AME represents, advocates, protects, and promotes the interests of thousands of members who are engaged in mineral exploration and development in BC and throughout the world. AME encourages a safe, economically strong and environmentally responsible industry by providing clear initiatives, policies, events and tools to support its membership in delivering responsible projects that advance reconciliation and provide benefit to all British Columbians.

EY

The transition to a low-carbon future demands that mining and metals companies reshape their role in what will be a new energy world. Bolder strategies that embrace digital innovation can help overcome productivity and cost pressures, create long-term value and secure a stronger licence to operate. EY's Global Mining & Metals team brings together the breadth of experience and talent needed to approach the entire transformation process. By considering four key pillars of change – structure and culture, customers, technology, and skills and capabilities – we can help you adapt for today and reap the opportunities of tomorrow. Together, we can build a better working world.

Contacts

If you'd like more information about this report, please contact the relevant organization through the following representatives.

BC GOVERNMENT

GORDON CLARKE
Director, British Columbia Geological Survey Mineral Development Office

gordon.clarke@gov.bc.ca

AME

JONATHAN BUCHANAN
Senior Vice President and Chief Operating Officer

jbuchanan@amebc.ca

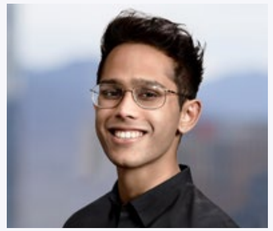
EY

IAIN THOMPSON
Partner, Business Consulting, Ernst & Young LLP

iain.thompson@ca.ey.com

KYLE WOLHUTER
Senior Manager, Business Consulting, Ernst & Young LLP

kyle.wolhuter@ca.ey.com



SAFWAAN HASSAN
Senior Consultant, Business Consulting, Ernst & Young LLP

safwaan.hassan@ca.ey.com

HARRY ARMSTRONG
Senior Consultant, Business Consulting, Ernst & Young LLP

harry.armstrong@ca.ey.com

EY | Building a better working world

EY is building a better working world by creating new value for clients, people, society and the planet, while building trust in capital markets.

Enabled by data, AI and advanced technology, EY teams help clients shape the future with confidence and develop answers for the most pressing issues of today and tomorrow.

EY teams work across a full spectrum of services in assurance, consulting, tax, strategy and transactions. Fueled by sector insights, a globally connected, multi-disciplinary network and diverse ecosystem partners, EY teams can provide services in more than 150 countries and territories.

All in to shape the future with confidence.

4661169

ey.com/ca

Disclaimer

EY has relied upon unaudited financial information provided by mineral and coal exploration companies and prospectors in BC, third party research, and information provided by other data sources and relevant associations and bodies. EY has not audited, reviewed or otherwise attempted to verify the accuracy or completeness of such information.

Financial information referred to in this report was prepared based on figures provided by entities, estimates and assumptions. As such, readers are cautioned that variations between estimations and actuals could be material.

Unless otherwise stated all monetary amounts contained herein are expressed in Canadian dollars.

EMLI staff assisted in the collection of survey data and information. Specifically, where a response had incomplete or inconsistent information, key points of data were solicited directly from the companies and prospectors themselves by Regional Geologists at the Mineral Development Office of the British Columbia Geological Survey and assessed using professional opinion and experience. Financial statement data and press release information were used in selected instances where no response was received from companies.