

Canadian Mining Industry

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The economy of Canada is a highly developed market economy. It is the 10th largest GDP by nominal and 16th largest GDP by PPP in the world.



- As with other developed nations, the country's economy is dominated by the service industry which employs about three quarters of Canadians.
- Canada has the third highest total estimated value of natural resources, valued at US\$33.2 trillion in 2019.
- It has the world's third largest proven petroleum reserves and is the fourth largest exporter of petroleum.
- It is also the fourth largest exporter of natural gas.
- Canada is considered an "energy superpower" due to its abundant natural resources and a small population of 37 million inhabitants relative to its land area.



Canada's mining industry is one of the largest in the world. Producing more than 60 metals and minerals, Canada is among the top five worldwide producers of 14 different commodity metals and minerals.

Mining industry is a mainstay of the economy that supports jobs and economic activity in every region.



Mineral production

Canada is the global leader in the production of potash and ranks among the top five global producers for cadmium, cobalt, diamonds, gemstones, gold, graphite, indium, nickel, niobium, platinum group metals, salt, titanium concentrate and uranium.

Canada also accounts for a significant proportion of the global production of primary aluminum from imported bauxite and alumina.

Canada's mineral production

Global ranking

Metals \$24 B

Nonmetals \$14 B

Coal \$6 B

1st

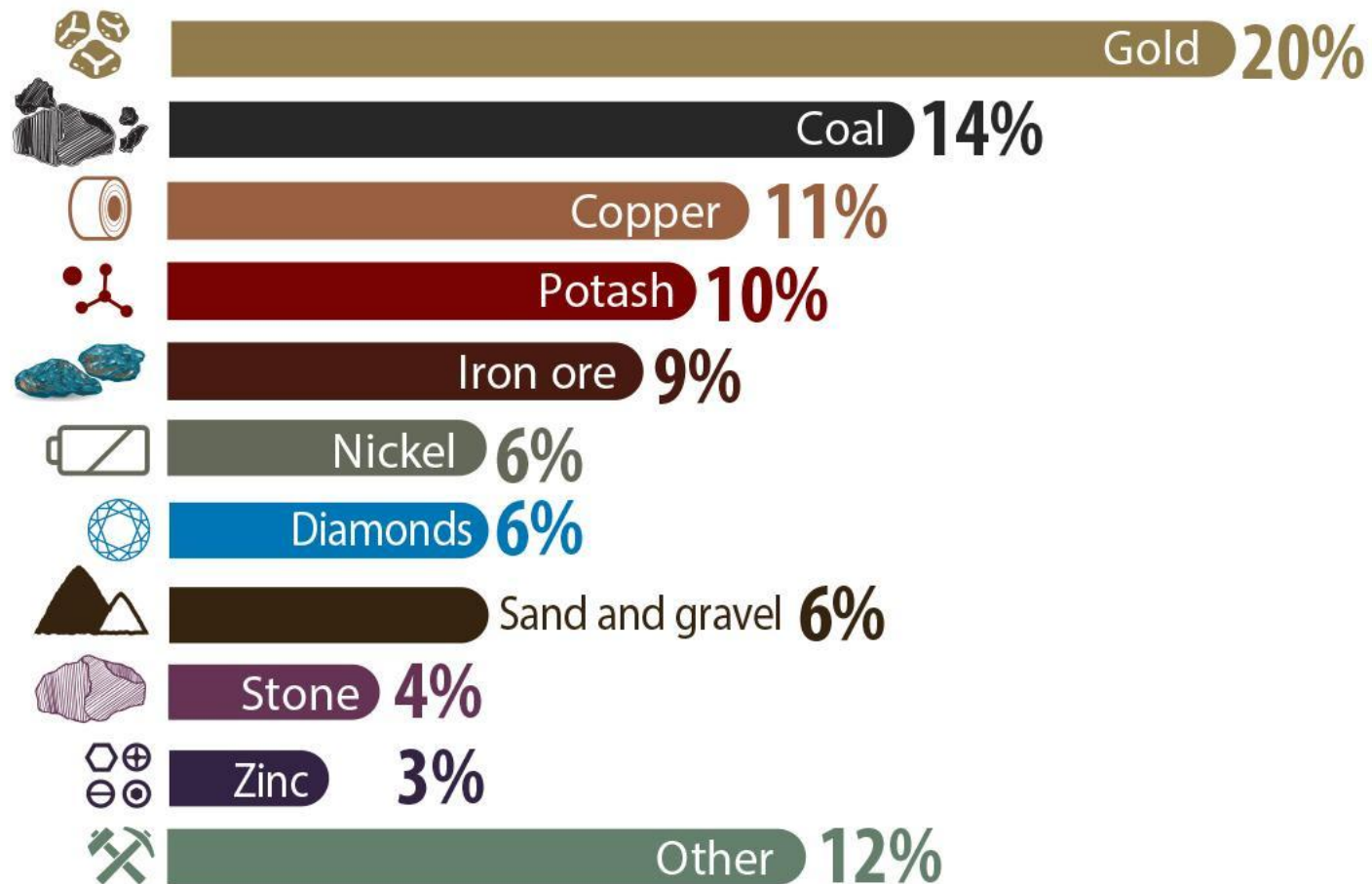
POTASH

2nd

URANIUM

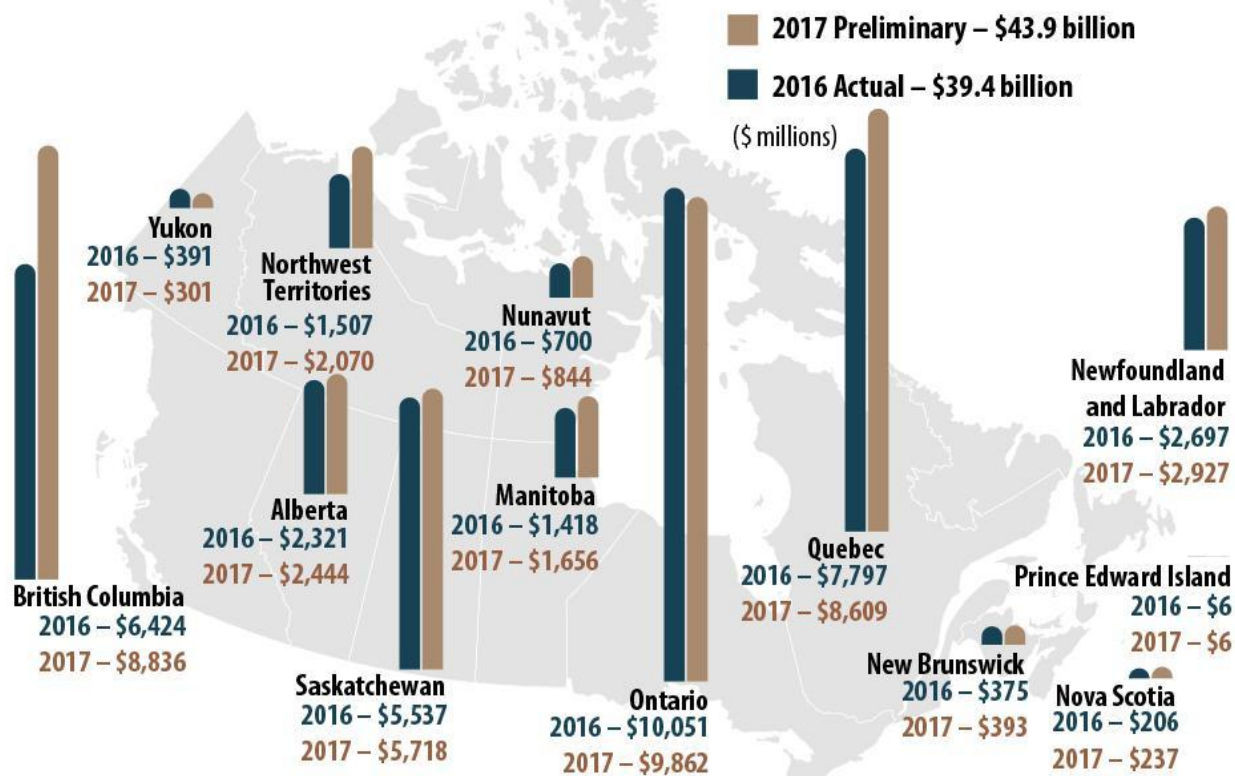
3rd

**PLATINUM
GROUP
METALS**



Leading minerals, by value of production, 2018

Minerals are produced in every province and territory. The top four provinces, Ontario, Quebec, British Columbia, and Saskatchewan, accounted for over three-quarters of Canada's total value of mineral production in 2018.



Mineral production, by province and territory, 2017 and 2018

Service suppliers

Canadian cities provide regional bases for supporting exploration, mining and allied industries through specialized equipment and service suppliers. Large urban areas, such as Toronto and Vancouver, are also recognized as global hubs for mining and mineral exploration, financing and legal services.

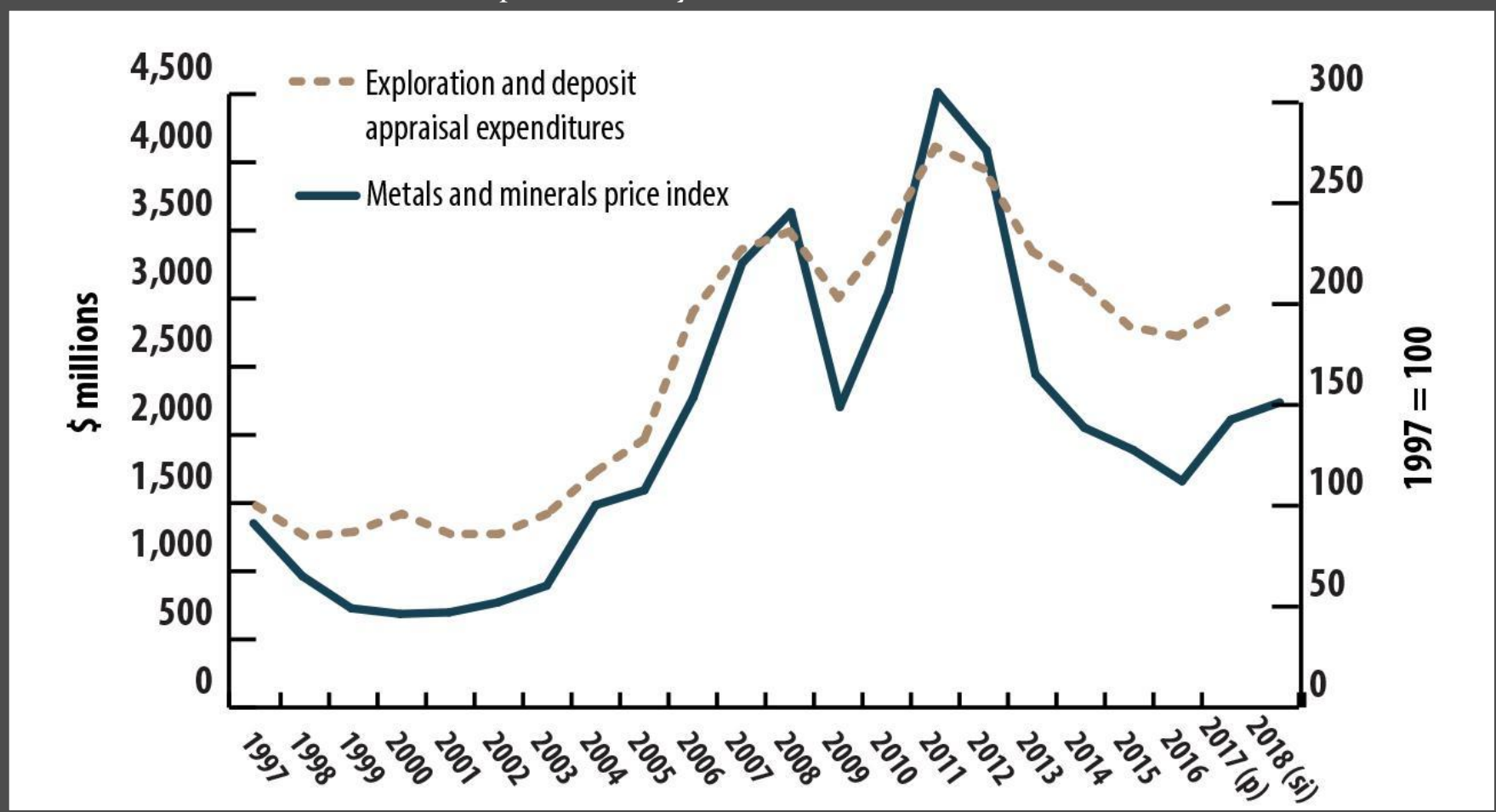




Mineral exploration

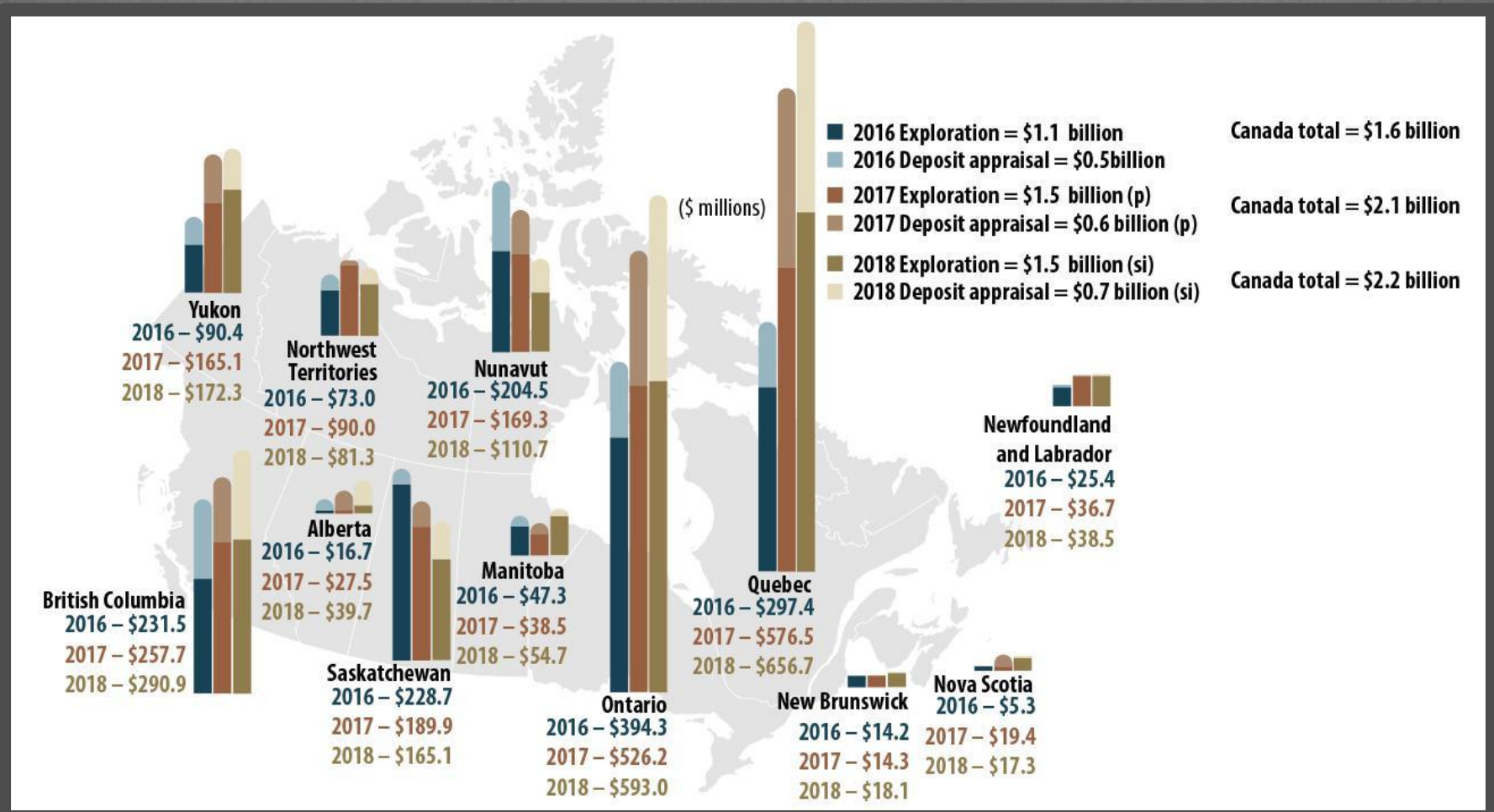
Mineral exploration is the search for materials in the Earth's crust, where concentration and quantity allow for extraction and processing at a profit.

Spending on mineral exploration and deposit appraisal activity depends largely on market conditions and commodity prices. Over the last decade, mineral and metal prices fluctuated significantly, reaching a historic high in 2011, which was followed by a period of decline that ended in 2016, when the prices of most precious and base metals began to rise again. The recovery of mineral prices continued until the first half of 2018 but the remainder of 2018 saw prices steadily decline.



Exploration and deposit appraisal expenditures and metals and minerals price index, 1998–2019

In 2018, Ontario was the leading jurisdiction in terms of spending on mineral exploration, followed by Quebec and British Columbia. These three jurisdictions accounted for 62.6% of total exploration and deposit appraisal expenditures.



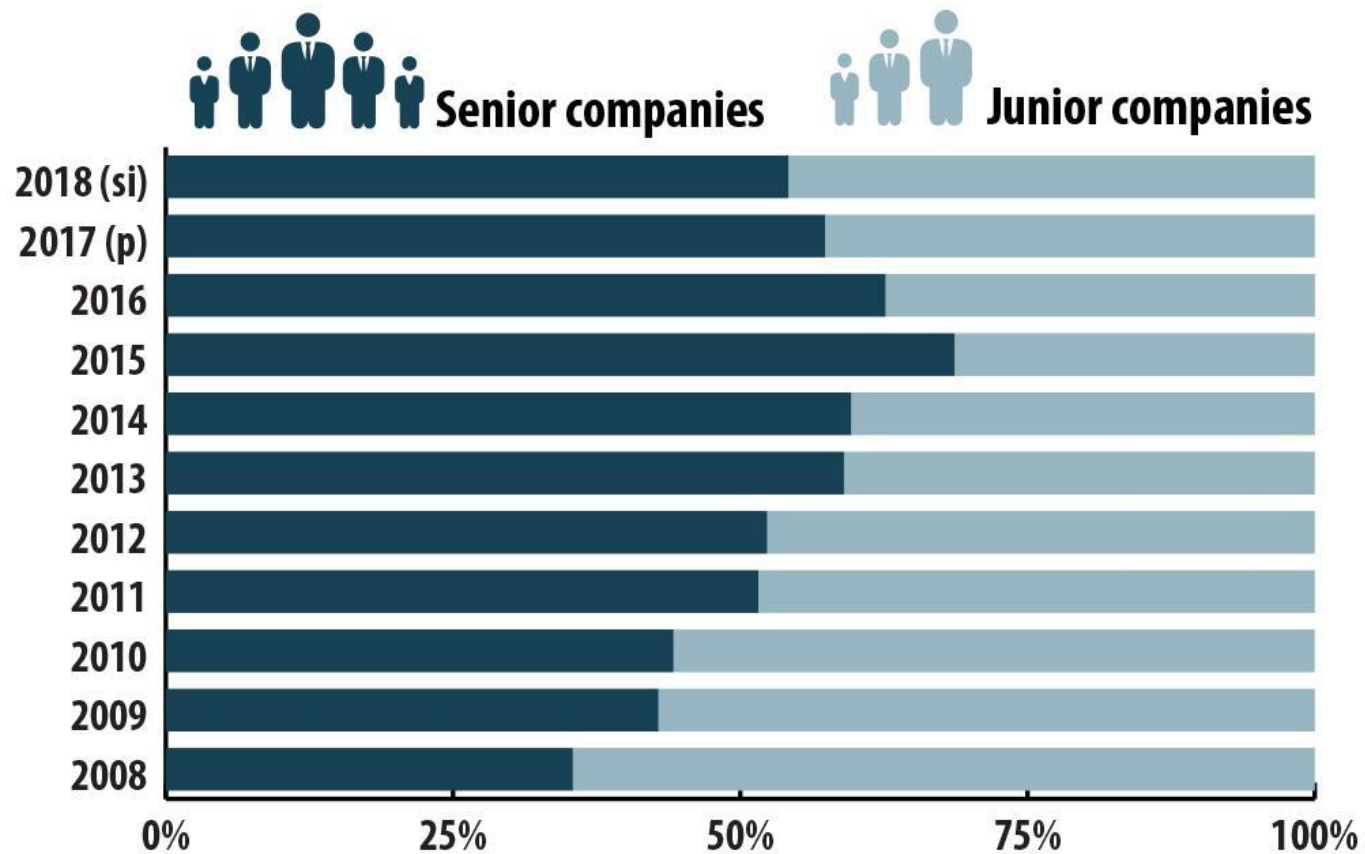
Exploration and deposit appraisal expenditures, by province and territory, 2017-2019



Two types of companies work in mineral exploration:

- **Senior companies** normally derive recurring operating revenues from mining or other business segments. These are not necessarily mining companies.
- **Junior companies** have no internally generated revenue (i.e., they do not have an operating mine) and rely mostly on equity markets to raise the capital necessary to conduct their exploration programs.

Junior mining companies tend to specialize in early-stage exploration activities, while senior companies are more likely to bring mines into production.

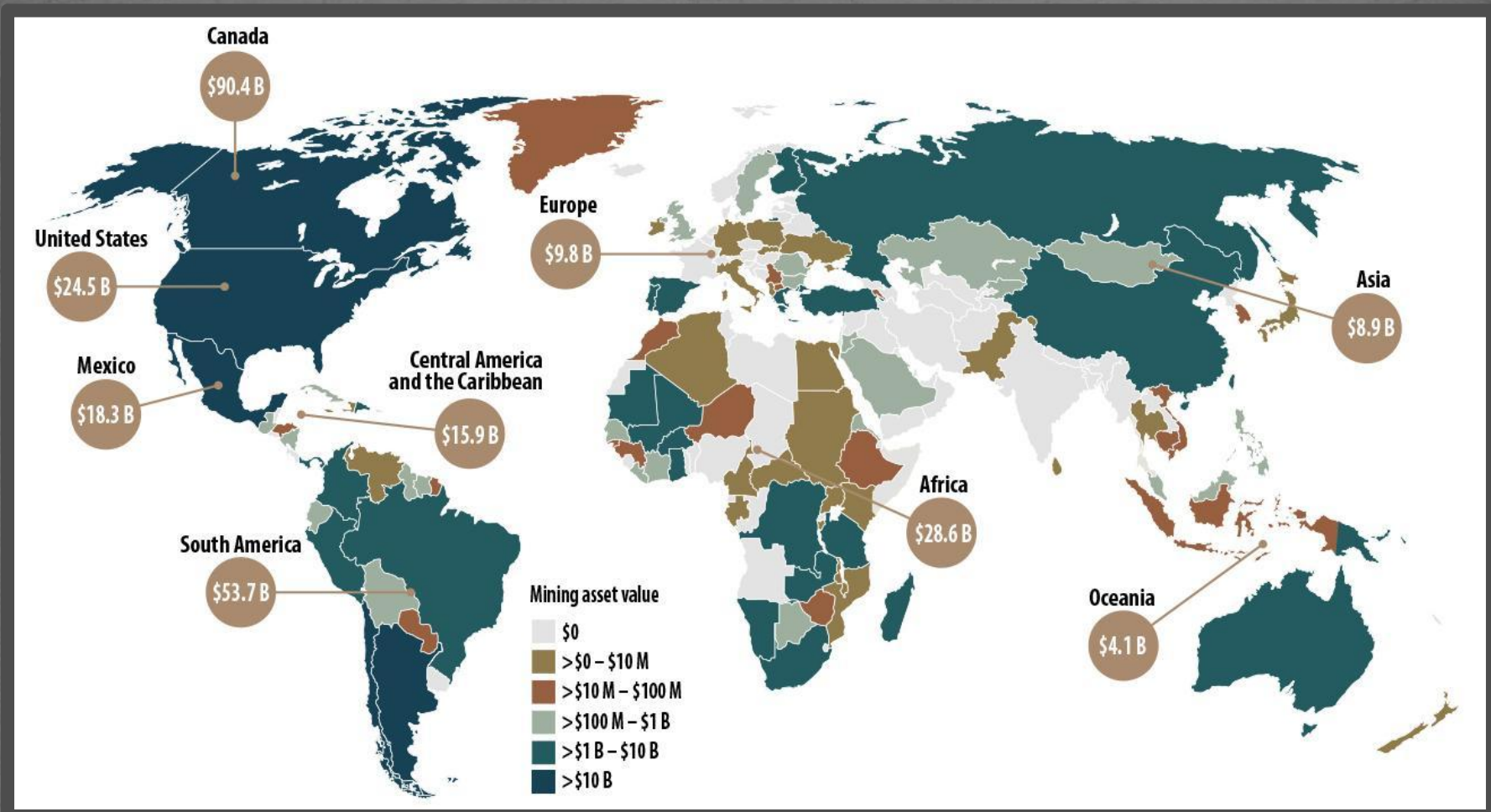


Exploration and deposit appraisal share of expenditures, by junior and senior companies, 2008–2019



Canadian mining assets

Canadian exploration and mining companies are active across the globe. The extent of their presence can be determined by examining the value and location of Canadian mining assets.



Canadian mining assets, 2017



Indigenous participation

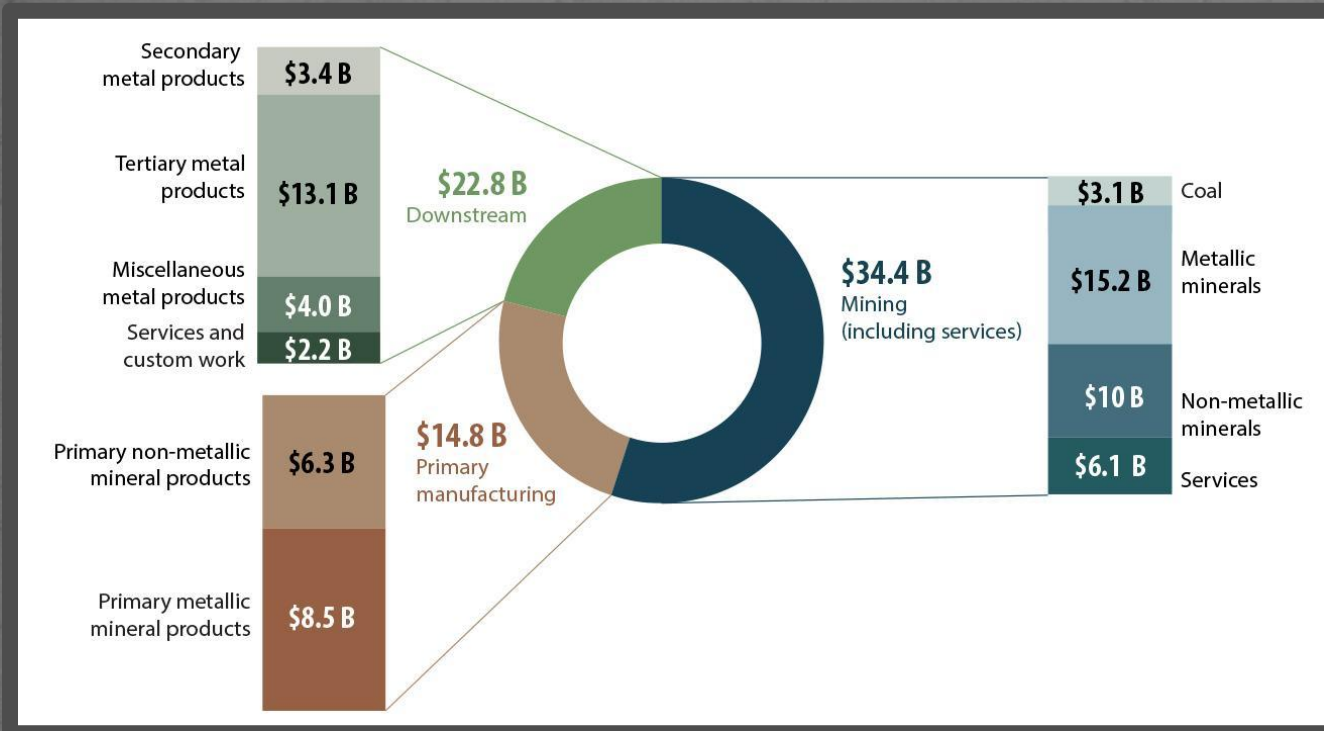
The Natural Resources Canada's Lands and Minerals Sector is committed to promoting Indigenous participation in mineral exploration and mining activities by sharing information to support informed decision-making that builds partnerships and promotes community capacity building.



- More than 16,500 Indigenous people are employed in the minerals sector
- Indigenous people account for 12% of the mining industry's labour force, making it the second-largest private sector employer on a participation basis
- Since 2009, approximately 309 agreements between exploration and mining companies and Indigenous communities and governments have been signed.

Nominal GDP in the minerals sector

In 2018, the direct contribution of Canada's minerals sector to Canada's gross domestic product (GDP) was \$72.4 billion, which represented 3.5% of Canada's total GDP. The indirect impacts from the minerals sector added a further \$25.4 billion to GDP, for a total impact of \$97.7 billion.



Minerals sector nominal gross domestic product, by subsector and product group, 2018

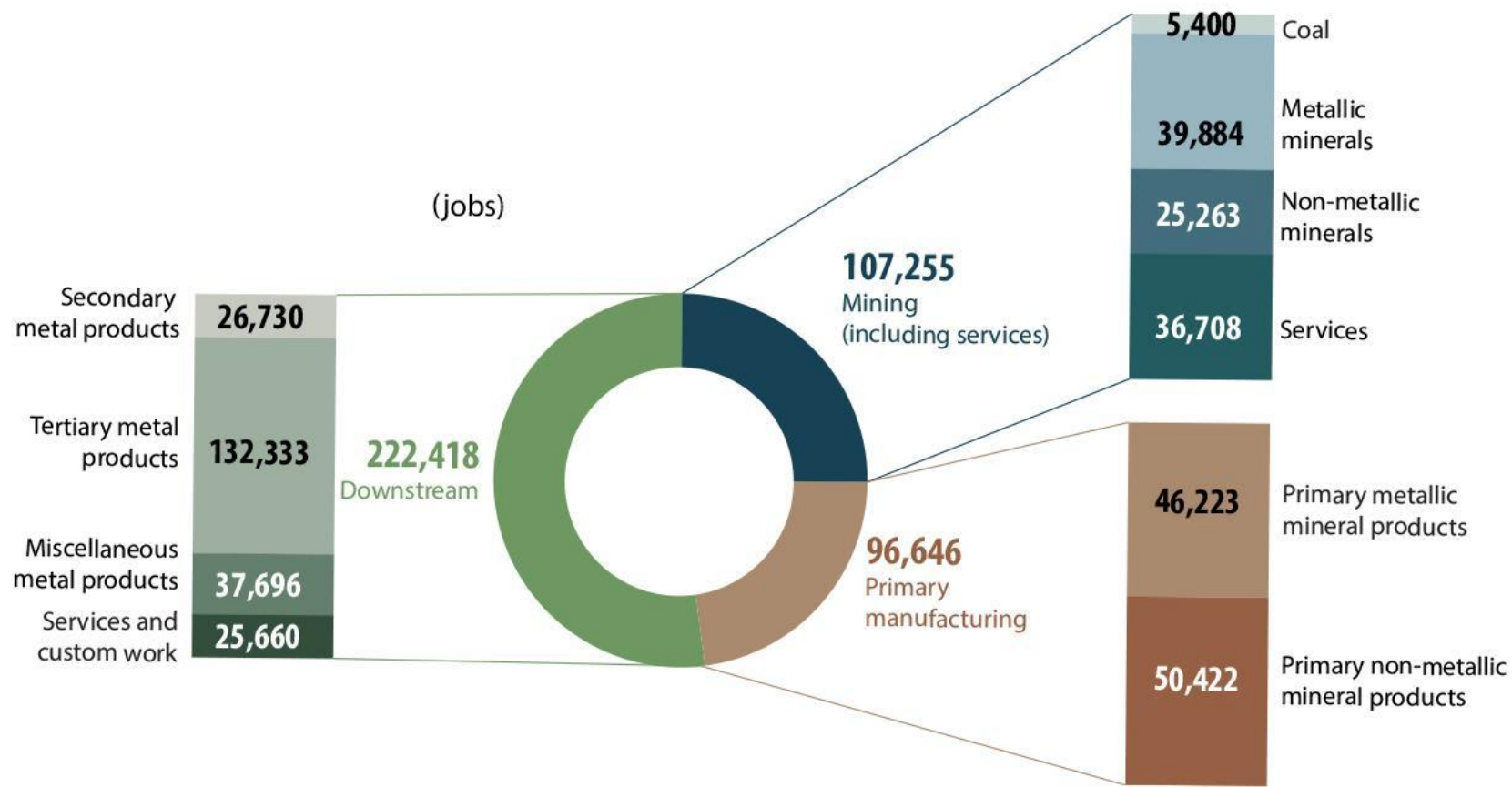


Employment in Canada's minerals sector

The minerals sector offers well-paid, high-quality jobs for Canadians across the country, including many in northern and remote locations.

In 2018, the minerals sector directly employed 409,000 individuals and indirectly employed an additional 217,000, for a total of 626,000 individuals.

At \$119,000, the average annual total compensation per job in the mining industry is nearly twice the all-industry average of \$60,000.



Minerals sector direct employment, by subsector and product group, 2018



Financing

The Toronto Stock Exchange (TSX) and TSX Venture Exchange (TSXV) are the world's primary listing venues for mining and mineral exploration companies, with more than 1,200 issuers, accounting for almost 50% of global listings in 2018.



In 2017
accounting
globally for

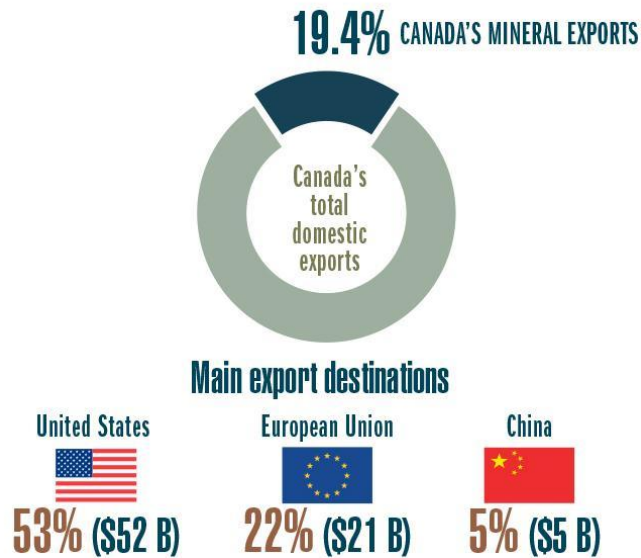
- 50% of public mining and exploration companies
- 59% of mining equity financings
- 30% of the mining equity capital raised

Canada is number one globally in equity financing raised for mining and mineral exploration.

Trade

In 2018, Canada's mineral imports and exports, which include ores, concentrates, and semi- and final-fabricated mineral products, recorded a balance of trade of over \$21.1 billion.

Valued at \$104.6 billion in 2018, Canada's domestic mineral exports accounted for 19% of its total merchandise exports.





Green technologies and clean energy applications

Developing Canada's minerals sector in clean and sustainable ways will ensure that it can continue to contribute to the Canadian economy for years to come.



The Green Mining Initiative, led by Natural Resources Canada in close partnership with provincial/territorial governments, industry, academia, non-governmental organizations and other interested stakeholders, such as the Canada Mining Innovation Council, aims to improve the minerals sector's environmental performance and create green technology opportunities.



Canada is primed to respond to increased demand for both traditional and emerging commodities needed in the production of clean technology applications.

The country is a key global producer of copper, nickel and cobalt, and hosts a number of advanced mineral projects for rare earth elements, lithium and graphite. These commodities are crucial in the production of solar cells, high-density batteries and wind turbines.

Thank you for attention!

