



cutting through complexity

KPMG GLOBAL MINING INSTITUTE

Canada

Country mining guide

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Strategy Series





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Executive summary

Among all the mining countries of the world, Canada is still among the mightiest. The country's vast territory – the world's second largest – holds enormous reserves of metals and minerals. Canada is the world's largest producer of zinc, and a major producer of gold, nickel, aluminium, lead and uranium. Canada is the world's largest potash producer with the province of Saskatchewan hosting the country's epicentre of global potash production. Canada produces 32 percent of all potash production globally, making it the world's largest potash producer and exporter.¹ The Toronto Stock Exchange (TSX) is the dominant financial market for global mining, listing 57 percent of the world's public mining companies, and a leader in global mining equity financings in comparison to other stock exchanges around the world.² The cities of Toronto and Vancouver are global mining centres with outstanding expertise and depth of experience.

Canada's mining sector is expected to reach CAD \$130B of investment by 2016. The country's political stability and flexibility on foreign investment and trade are important facilitators for doing business. Environmentally, the Canadian mining sector is embracing long-term sustainability with industry initiatives that are superseding government regulation and setting world standards. Clean hydroelectricity supplies 80 percent of the power in Canada, and the country is making major investments in energy and transportation infrastructure through its Economic Action Plan.

CANADA



1ST

**LARGEST GLOBAL
PRODUCER OF ZINC
AND POTASH**

MAJOR

**PRODUCER OF GOLD,
NICKEL, ALUMINUM,
URANIUM AND LEAD.**

57%



**OF THE WORLD'S PUBLIC MINING COMPANIES
LISTED IN THE TORONTO STOCK EXCHANGE (TSX),
EMERGED AS THE DOMINANT FINANCIAL MARKET
FOR GLOBAL MINING.**

**CAD \$130_B
OF INVESTMENT**



**CANADA'S MINING SECTOR IS EXPECTED TO
REACH BY 2016.**

80%



**OF THE POWER IN CANADA IS SUPPLIED BY THE MEANS OF
HYDROPOWER AND NUCLEAR POWER MEASURES.**

¹ <http://www.newswire.ca/en/story/1251021/potash-feeding-the-world-exhibit-opens-potash-producers-educate-public-on-global-food-security-local-career-opportunities>

² Source: Gamah International, 2012 YTD December, compiled by Toronto Stock Exchange

Country snapshot

Canada ^{3, 4}	
Geography	<p>Canada is the world's second-largest country in terms of land area, after Russia.</p> <ul style="list-style-type: none"> Located in northern North America and spread of 9,984,670 square kilometers, Canada has 1.02 percent more total area than US which has 9,826,630 square kilometers of total area.⁵ It borders the North Atlantic Ocean on the east, North Pacific Ocean on the west, and the Arctic Ocean on the north. The country is mostly plains with mountains in west and lowlands in south east. For administrative and political purpose, Canada is divided into 10 provinces and three territories.
Climate	Canada's climate varies markedly; it is temperate in south to subarctic and arctic in north.
Population	With an estimated population of 34.3 million (July 2012 est.), Canada is the 35th most populated country in the world. The median age is 41.2 years.
Currency	<p>Canada's official currency is the Canadian dollar (CAD). The Bank of Canada – the country's central bank – administers the legal currency, which has been on a free float since 1970.</p> <p>Average exchange rate in 2013 was:</p> <ul style="list-style-type: none"> CAD1.0299 : US\$1 CAD3681 : EUR1⁶

Source: CIA Factbook and Economic Intelligence Unit (EIU)

³ CIA: The World Factbook, Accessed on December 28, 2012

⁴ Canada Country Profile, EIU, Accessed on December 28, 2012

⁵ <http://www.unitednorthamerica.org/simdiff.htm>

⁶ 2013 Financial markets department year average of exchange rates", Bank of Canada

EIU rankings: ease of doing business

Canada ranked fourth among the 82 countries covered under the EIU business environment ranking for 2007–11. The country ranked first in regional ranking, which included G7 economies.

Canada's positive factors include its foreign investment policy, political stability, low levels of foreign trade and exchange controls, and good financing opportunities.

Value of index ^a		Global rank ^b		Regional rank ^c	
2008–12	2013–17	2008–12	2013–17	2008–12	2013–17
8.16	8.30	7	6	1	1

a. Out of 10

b. Out of 82 countries.

c. Out of 7 countries: Canada, France, Germany, Italy, Japan, the UK and US.



Type of government

Canada is a constitutional monarchy. Queen Elizabeth II is the head of State, represented by Governor General David Johnston, who was appointed by the Queen on the advice of the prime minister for a 5-year term. Prime Minister Stephen Harper is the official head of the Government. The cabinet members are selected by the prime minister usually from among the members of his own party sitting in the parliament.

Canada has a bicameral federal parliament. The legislative branch comprises the senate (the upper house, 105 members) and the House of Commons (the lower house, 308 members). The members of the senate are appointed by the governor general on the advice of the prime minister, while the members of the lower house are elected directly by popular vote for a 4-year term.

The judicial branch in Canada consists of a national Supreme Court of Justice (the highest court of criminal law), Federal Court of Canada, Federal Court of Appeal, Tax Court of Canada and smaller provincial/territorial courts. Judges of the Supreme Court are appointed by the governor general on the recommendation of the prime minister.^{7,8}

Economy and fiscal policy

Canada is an industrialized economy. After World War II, Canada's manufacturing, mining, and service sectors grew significantly because of sound industrial policies. 1994 NAFTA and 1989 US-Canada FTA opened doors for exports, three-fourths of which are absorbed by the US alone. After years of sustained growth, the country witnessed a dip in 2009 when it posted its first fiscal deficit after 12 years of surplus. However, the Canadian economy recovered from the global slowdown after benefiting from improved global conditions. In 2012, Canada's GDP stood at C\$1,662 billion. For full year 2012, real GDP grew 1.7 percent, over 2.5 percent increase in 2011.

GDP growth

Canada's economy picked up speed in 3Q13 to grow at the fastest pace in two years. Q3 Canadian GDP annualized 2.7 percent vs. 2.5 percent expected. Household spending gives GDP the biggest boost although it slowed from Q2.

Real GDP growth in Canada is expected to remain fairly healthy, but will occasionally falter. Better growth in the US, Canada's main trading partner, in 2014-18 will increase external demand for Canadian goods and services, and The Economist Intelligence Unit forecasts a pick-up to an annual average of 2.3 percent growth over 2013–2017.

Over the longer term, Canadian economy is forecast to expand by an average of 2.4 percent per year in real terms in 2012-30, somewhat slower than the 2.9 percent annual average growth rate achieved in the eighties and nineties. As the US faces a period of modest growth, Canada's links with its large neighbour will be less of a catalyst. Instead, Canada's large resource endowment, which gives it exposure to China and other emerging markets, will play a bigger role in driving growth.

⁷ CIA: The World Factbook, Accessed on December 28, 2012

⁸ Canada Country Profile, EIU, Accessed on December 28, 2012

Monetary and Fiscal Policy

Inflation in Canada has remained low in recent months, reflecting the significant slack in the economy, heightened competition in the retail sector, and other sector-specific factors. With larger and more persistent excess supply in the economy, both total CPI and core inflation are expected to return more gradually to 2 percent, around the end of 2015. The central bank has kept its policy rate fixed at one percent since September 2010, leading to one of the most stable and favourable borrowing environments in many decades.

Foreign Trade

On a balance-of-payments basis, merchandise exports amounted to US\$463 billion in 2012. Merchandise imports rose to an estimated US\$475 billion, leaving a trade deficit of US\$12 billion. The current account recorded a deficit of US\$62 billion in 2012 (3.4 percent of GDP).

In Canada, uncertain global and domestic economic conditions are delaying the pick-up in exports and business investment. The Bank of Canada expects that a better balance between domestic and foreign demand will be achieved over time and that growth will become more self-sustaining.

Economic Statistics

- Income level – High income OECD
- GDP (current US\$) – \$1.821 trillion 2012
- Population (Total) – 34.88 million 2012

Canada is projected to grow at 2.4 percent in the 2012–20 period, slightly lesser than average 2.9 percent growth achieved in the 1980s and 1990s. Long-term prosperity indicators remain positive. Proximity and good economic ties with the US, openness toward foreign trade, encouraging private participation, easily available capital financing – all these policies contribute to a stable macroeconomic environment conducive to growth.^{9, 10, 11, 12, 13}

⁹ Economic Intelligence Unit

¹⁰ <http://business.financialpost.com/2013/10/23/bank-of-canada-monetary-policy-statement-oct-23-2013/>

¹¹ <http://www.cbc.ca/news/business/oecd-says-bank-of-canada-may-have-to-hike-rates-in-2014-1.2432183>

¹² Economic Intelligence Unit

¹³ <http://data.worldbank.org/country/canada>



Fraser institute rankings

Economic Freedom of the World 2012 Report¹⁴

Among the 144 countries covered in Fraser Institute's Economic Freedom of the World 2012 Report, Canada ranked fifth, with a score of 7.97 on a scale of 10.

The annual peer-reviewed report ranks the countries on the basis of their policies, which encourages 42 different economic measures in the following areas:

- Size of government – expenditures, taxes and enterprises
- Legal structure and security of property rights
- Access to sound money
- Freedom to trade internationally
- Regulation of credit, labour and business

Table 1: Canada's scores, Policy Potential Index*, Fraser Institute's Survey of Mining Companies 2012/2013¹⁵

	Rank	Scores				
Provinces	2012/13	2012/13	2011/12	2010/11	2009/10	2008/09
Alberta	3	92.6	91.5	90.4	89.9	86.4
British Columbia	31	63.6	62.5	54.4	48.7	61.2
Manitoba	21	73.4	74.6	80.3	76.8	79.9
New Brunswick	4	90.8	95.0	67.3	94.1	80.4
NFLD/Labrador	18	76.8	77.0	74.6	78.3	84.6
NWT	29	63.7	50.4	40.2	40.0	46.9
Nova Scotia	12	81.8	77.1	68.6	72.6	74.7
Nunavut	37	59.9	58.5	47.6	45.0	44.4
Ontario	16	78.3	79.4	68.7	66.2	75.2
Québec	11	81.9	89.0	86.5	96.7	96.6
Saskatchewan	13	81.6	88.9	87.5	81.6	79.1
Yukon	8	83.8	83.0	73.0	73.9	72.5

¹⁴ Economic Freedom of the World 2012 Annual Report, Free The world, September 2012

¹⁵ <http://www.fraserinstitute.org/uploadedFiles/fraser-ca/Content/research-news/research/publications/mining-survey-2012-2013.pdf>

Table 2: Canada's scores, Current Mineral Potential Index, Fraser Institute's Survey of Mining Companies 2012/2013**

Provinces	Rank	Scores				
	2012/13	2012/13	2011/12	2010/11	2009/10	2008/09
Alberta	24	0.56	0.60	0.53	0.48	0.49
British Columbia	34	0.51	0.50	0.43	0.49	0.47
Manitoba	33	0.52	0.64	0.61	0.58	0.53
New Brunswick	12	0.62	0.54	0.46	0.57	0.54
NFLD/Labrador	14	0.61	0.66	0.57	0.60	0.64
NWT	18	0.58	0.44	0.35	0.34	0.44
Nova Scotia	37	0.50	0.41	0.38	0.43	0.40
Nunavut	28	0.55	0.51	0.38	0.39	0.55
Ontario	17	0.59	0.56	0.60	0.50	0.57
Québec	26	0.55	0.65	0.76	0.73	0.77
Saskatchewan	5	0.72	0.69	0.75	0.69	0.67
Yukon	7	0.71	0.69	0.66	0.63	0.60

Note **: The Current Mineral Potential index is based on respondents' answers to the question about whether or not a jurisdiction's mineral potential under the current policy environment encourages or discourages exploration. It assumes current regulations and land use restrictions.

Table 3: Canada's scores, Policy/Mineral Potential index*, Fraser Institute's Survey of Mining Companies 2012/2013**

Provinces	Rank	Scores				
	2012/13	2012/13	2011/12	2010/11	2009/10	2008/09
Alberta	50	0.57	0.64	0.61	0.56	0.64
British Columbia	18	0.72	0.83	0.80	0.79	0.77
Manitoba	25	0.69	0.76	0.74	0.80	0.78
New Brunswick	44	0.60	0.52	0.43	0.65	0.61
NFLD/Labrador	29	0.68	0.82	0.76	0.78	0.73
NWT	16	0.73	0.85	0.87	0.82	0.77
Nova Scotia	86	0.40	0.47	0.40	0.56	0.42
Nunavut	12	0.74	0.85	0.84	0.77	0.84
Ontario	8	0.75	0.78	0.85	0.81	0.80
Québec	16	0.73	0.82	0.84	0.84	0.88
Saskatchewan	12	0.74	0.81	0.89	0.79	0.80
Yukon	2	0.81	0.89	0.90	0.82	0.76

Note ***: The Policy/Mineral Potential Index is based on respondents' answers to the question about mineral potential of jurisdictions, assuming their policies are based on "best practices." It assumes no land use restrictions in place and the industry "best practices".

Regulatory environment

Canada's mining sector is regulated both at the federal and the provincial level. All jurisdictions have separate mining rights legislations except Nunavut, which is regulated by the Department of Indian Affairs and Northern Development. Regulations such as the Mineral Act, the Mining Act, the Mineral Resources Act, and the Mineral Tenure Act govern the mining sector at the provincial/territorial level, while the Canadian Environmental Protection Act, 1999, Metal Mining Effluent Regulations under the Fisheries Act, and other similar acts govern the sector at the federal level. However, the regulatory environment for mining activities in Canada is complex and unclear when it comes to approval processes, timetables, and responsibilities.

Mining activities on publicly owned land and minerals generally fall within the province in which it is located. Mineral exploration, development, conservation, and management are controlled by the provincial governments, while jurisdiction in matters such as environmental and taxation is shared between the federal and provincial governments. Further, exports, foreign investment controls, and nuclear matters are exclusively controlled by the federal government.

Rights to unexplored land and the underlying minerals are granted by the "Crown," which owns them. The Crown may refer to either the federal or provincial government. Mineral rights are government-owned and cannot be purchased, only leased by individuals or companies. As a result, the governments own mineral rights to more than 90 percent of the land. The rights are granted for certain tenure, on a first come, first serve basis.^{16, 17, 18}



¹⁶ Mining in 37 jurisdictions worldwide: 2012, Getting the Deal Through, 2012

¹⁷ Mining regulations, Natural Resources Canada

¹⁸ Canada Mining Laws & Regulations- Infomine

Global Leaders in Mining – TSX (Toronto Stock Exchange) & TSX Venture Exchange

The Toronto Stock Exchange (TSX) is the largest stock exchange in Canada, the third largest in North America and the seventh largest in the world by market capitalization.¹⁹ Based in Canada's largest city, Toronto, it is owned by and operated as a subsidiary of the TMX Group for the trading of senior equities. A broad range of businesses from Canada, the United States, Europe, and other countries are represented on the exchange. In addition to conventional securities, the exchange lists various exchange-traded funds, split share corporations, income trusts and investment funds. The TMX Group has an approximate market cap value of \$2.1 trillion.²⁰

The TSX Venture Exchange (TSXV) is a stock exchange in Canada. It is headquartered in Calgary, Alberta and has offices in Toronto, Vancouver, and Montreal. All trading through the Exchange is done electronically, so the Exchange does not have a "trading floor". It was previously known as the Canadian Venture Exchange (CDNX), but in 2001 the TMX Group purchased it and renamed it.

The Toronto Stock Exchange is the leader in the mining and oil & gas sector; more mining and oil & gas companies are listed on Toronto Stock Exchange than any other exchange in the world.

The Leading Exchange at a glance

2012 Mining markets at a glance

	TSX	TSXV	TSX & TSXV	LSE	AIM	ASX	JSE	HKEx
Number of Mining Issuers Listed	364	1,309	1,673	40	145	708	49	57
Quoted Market Values (US\$ Billions)	381.1	19.3	400.4	418.4	11.7	437.7	318.8	207.9
New Mining Listings	28	109	137	2	15	37	3	4
Equity Capital Raised (US\$ Billions) – 2012	7.5	2.8	10.3	–	0.954	2.1	–	0.142
Number of Financings – 2012	250	1,450	1,700	–	147	559	–	1

¹⁹ As at December 31, 2012. Monthly reports, World federation of Exchanges.

²⁰ Source: Exchange Websites, Gamah International, Capital IQ. Data is as at or YTD Dec 31 2012



Sustainability and environment

Canada is taking steps to protect its natural environment while competing in a global economy. The Canadian mining sector has realized the importance of long-term sustainability. Canadian miners are upping their sustainability practices, according to the Mining Association of Canada's (MAC's) eighth annual Towards Sustainable Mining Progress Report.²¹

In 2004, MAC laid down guiding principles, Towards Sustainable Mining (TSM), which governs key activities of companies in all sectors of mining and mineral processing industry. This is a pioneering initiative in the field of corporate social responsibility that helps mining companies assess their environmental and social responsibilities. MAC makes the participation in TSM mandatory for all its members. The three benchmarks on which these companies evaluate themselves are communities and people, environment, and energy and efficiency. Each year members first evaluate themselves and submit their TSM performance records to the MAC. An external verification is also done every three years to check the claims made by the companies. Following this, a CEO letter of assurance is sent to the MAC confirming external verification. The final check, a Community of Interest "COI" panel review is conducted every year on two companies who have to appear and present their TSM results to the panel. The COI Advisory Panel was established in 2004, when Towards Sustainable Mining (TSM) began. It brings together about 20 individuals and representatives from Aboriginal and labour organizations, communities where the industry is active, environmental and social NGOs, and the financial community, along with members of the Mining Association of Canada's (MAC) Board and other mining industry representatives. The COI Advisory Panel provides a direct link with civil society, communities of interest and Aboriginal groups, enabling open dialogue and engagement with external stakeholders. By bringing together individuals from different backgrounds, the panel functions as an independent mechanism for analyzing the development and implementation of TSM. Thus, the system has a comprehensive check in place to ensure that the industry works in a proactive, socially responsible way.²²

The Canada Mining Innovation Council – a network of industry, government, and academic leaders – was established to promote research and innovation, leading to sustainable practices. The council aims to strengthen the strategy around tailing management, energy efficiency, and deep exploration activities. But such a pan-Canada initiative requires massive long-term investments and commitment.²³

²¹ Miners upping sustainability practices: report, Business Vancouver, December 14, 2012

²² TSM, 2012-The Mining Association of Canada

²³ Mining Companies To Improve Long-Term Sustainability, CMIC, November 2009



Taxation

Canada has three territories, which are governed by the federal government. Each of the federal government, the provinces, and the territories levies income taxes on corporations and individuals. With the exception of Prince Edward Island (which has no mining activity), each of the provinces and the territories also levies separate mining taxes or royalties on mining activities. For tax purposes, there is little distinction between a province and a territory; consequently, any reference in this book to a province includes a territory.

In many respects, Canada's tax environment is favourable to business and in particular to mining activities. The following are some of the favourable attributes of the current system:

- The rates of income tax are low relative to most other jurisdictions in which mining activities take place.
- The accelerated write-off of exploration and mine development expenses and the cost of tangible assets permits taxpayers to recover their costs of bringing a mine into production before any tax must be paid.
- Tax credits for exploration and mine development expenses reduce the tax liability of corporations; such credits can be carried forward for a period of 20 years.
- Operating losses can be carried forward for 20 years, making it almost certain that a taxpayer will be able to use start-up losses if it does develop viable mining operations.
- Only one-half of a capital gain is included in income.
- Capital taxes have been eliminated or phased out in most jurisdictions.
- Most provinces have sales and use taxes that allow businesses to pass along the tax to the ultimate consumer. Therefore, in the end, businesses do not bear the cost of these taxes.
- Most provinces impose a profit tax instead of royalties on mining operations.
- A flow-through share mechanism allows corporations to renounce exploration and mine development expenses to investors. This allows corporations to monetize expenses that they are unable to utilize in the foreseeable future.
- There is no withholding tax on interest paid by a corporation to an arm's-length non-resident lender.
- Most of Canada's treaties provide that the rate of withholding tax on dividends paid to a non-resident parent is limited to 5 percent.

Some features of the Canadian tax system are not so favourable to the mining industry:

- Some provinces impose sales and use taxes that are borne by businesses, rather than the ultimate consumer.
- Some provinces require mining operators to pay royalties and not profit-based taxes.
- There are other taxes and charges for which a business is liable, whether or not it is profitable. These include Canada Pension Plan and Employment Insurance payments at the federal level, and provincial employer health taxes and payroll taxes.

Canadian income taxes are applicable to all forms of business activity that are either carried out in Canada or carried out by a resident of Canada. These taxes are levied on the net income of the entity conducting the business (including mining operations). Federal tax on companies' taxable income, derived from resource exploitation, was reduced to 15 percent in 2012, in tandem with the general federal corporate tax rate. In addition to these federal taxes, provincial governments also impose income and mining taxes on mining activities. Provincial mining taxes are deductible in computing taxable income for federal and provincial income tax purposes.

Some provinces impose one flat rate on taxable income of mining firms while others impose other territorial mining taxes, duties, or royalties in addition to the income taxes. Generally, royalties vary from 5 percent to 15 percent, depending on the total income. For example, Alberta imposes 1 percent royalty on mine-mouth revenue mining tax and 12 percent royalty on net income, while Ontario levies a flat 10 percent mining tax on taxable income greater than CAD500,000. Some provincial governments such as Ontario's allow deductions/reduced rates to companies operating mines in remote areas to encourage development.

Canada also levies sales tax both at federal and provincial levels in some provinces. Federal goods and services tax (GST) is levied at 5 percent on most consumption in Canada. Provinces choose either to levy a separate provincial sales tax or combine it with the federal GST to levy harmonized sales tax (5%–15%).

In 2010, the Canadian mining industry, including oil sands mining, paid approximately CAD8.4 billion in taxes to federal and provincial/territorial governments. This comprised CAD3.4 billion in royalties, CAD3.1 billion in corporate income taxes, and CAD2 billion in personal income taxes. Approximately 40% of CAD8.4 billion went to federal government and the remaining 60 percent to provincial/territorial governments.^{24, 25, 26, 27}

²⁴ 2011 Facts and Figures, MAC

²⁵ Website of MiningTax Canada Accessed on January 7, 2013

²⁶ Canada: Tax regulations, EIU, Accessed on December 28, 2012

²⁷ KPMG's Guide to Canadian Mining taxation

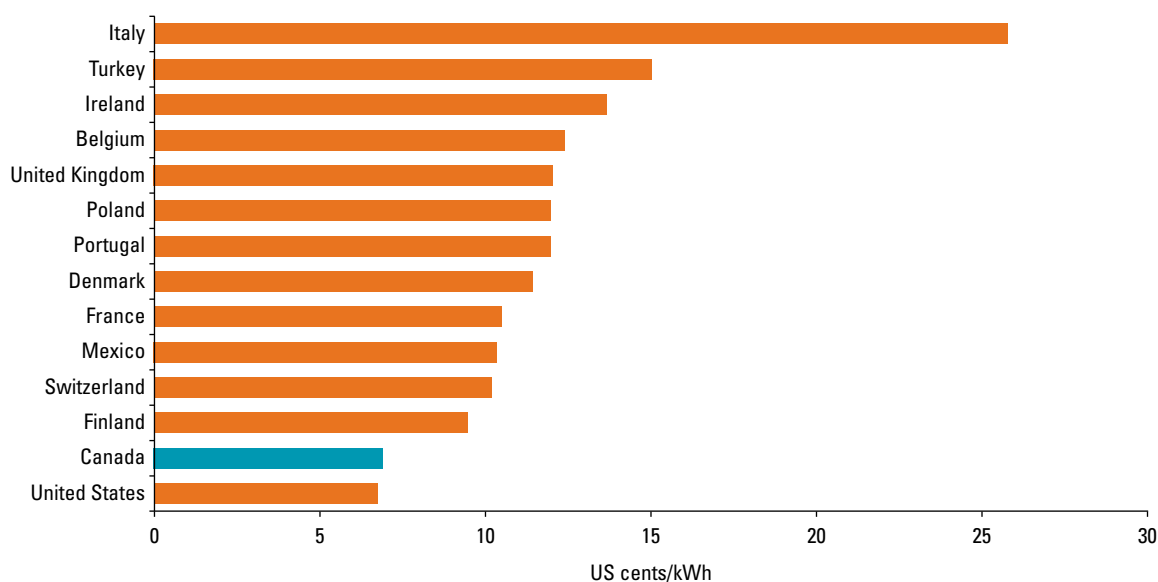
Power supply

Power sector in Canada is dominated by renewable sources, which accounts for a large portion of the energy produced in the country. Hydropower, along with nuclear power, accounts for approximately 80 percent of the total output. Hydropower accounts for the chief form of energy in provinces such as Québec, British Columbia, Manitoba, and Newfoundland and Labrador, while nuclear energy is the major source in Ontario, with a number of indigenously designed CANDU nuclear reactors in the region. Alberta, Nova Scotia, and Saskatchewan rely on coal as the major form of energy. In the past decade, Ontario and Alberta have deregulated their electric industries to create electricity markets to increase investment and competition.

In 2011, Canada's electricity sector contributed CAD28.36 billion (approximately 2.24 percent) to national GDP (measured at 2002 prices) while its capital investment stood at CAD20 billion. The sector has a workforce of more than 280,000. The energy sector in the country is organized on provincial lines as is the jurisdiction over natural resources. Though provinces and territories regulate transmission and distribution rates within their regions, inter-provincial distribution is monitored by the federal government, through the National Energy Board. Natural Resources Canada also advises the government on energy policies. The total power generation in the country was 592.32 Twh in 2011. The country is a net exporter of energy, with exports totaling 51.4 Twh in 2011 while imports stood at 14.6 Twh. A massive amount of capital tuning to CAD350 billion is needed to fund the country's energy requirement over the next 20 years.^{28, 29}

Comparison of cost of power generation

Industrial electricity prices, 2010



Source: <http://www.electricity.ca/media/Electricity101/Electricity101.pdf>

²⁸ Canada's Electricity Industry, CEA

²⁹ Key Canadian Electricity Statistics, Canadian Electricity Association, May 2012

Infrastructure

Although Canada is among the world's most economically developed countries, it is vast in area with a relatively small population concentrated along the southern border. As a result, the massive northern territories – where most mineral discoveries are made – are light on basic transportation and energy infrastructure such as:

- Roads
- Railways
- Ports
- Electric power corridors
- Oil & gas delivery systems

Depending on their size and scale, mining projects may need some or all of these facilities as well as plants for processing ore and for proper storage/disposal of tailings.

Roads and railways can be built to service mine sites, but often at great capital expense because distances are long, terrain is rugged and climate variations are severe. Smaller mining companies usually rely on existing road systems, and access existing rail infrastructure by way of confidential contracts. While this choice definitely reduces capital costs, it can increase operating costs by using inefficient routes for moving processed ore to market.

Dedicated port facilities are equally capital intensive to build, time intensive for environmental clearance, and difficult to operate year-round in Canada's severe climate conditions. The mining industry is a major contributor to Canada's St. Lawrence Seaway. According to the 2011 Traffic Report, prepared jointly by the Seaway's management and development corporations, shipments of iron ore, coke and coal represented nearly 40 percent of total Seaway traffic in 2011. Other mine products (mainly salt) contributed a further 12 percent.³⁰ Ports in Canada may be publicly or privately operated, but the federal and/or provincial government(s) are involved in regulation if not operation. At the feasibility stage of a new project, mining companies will usually identify an existing port facility and engage the owner/operator in discussion about suitability for present and future needs.

Canada is rich with natural resources for producing clean hydroelectricity. In 2012, electricity generation capacity in Canada reached 134 GW. Hydroelectricity remains the primary source of electric power, accounting for 57 percent of total capacity. Natural gas, coal, and nuclear plants provide most of the remaining supply, while non-hydro renewables such as wind, solar and biomass make up 5.5 percent of capacity.³¹ Much of this power is generated by water systems in the north where mine sites are often located. Nevertheless, due to Canada's long distances, expensive power corridors usually need to be carved out of rugged terrain to service specific mine sites. This capital cost is almost unavoidable, since most mines require substantial amounts of electricity to power ore processing equipment.

³⁰ http://www.mining.ca/www/media_lib/MAC_Documents/Publications/2013/Facts%20and%20Figures/FactsandFigures2012Eng.pdf

³¹ Website of Infrastructure Canada Accessed on January 4, 2013

Economic Action Plan 2013

Economic Action Plan 2013 is the next chapter in the Government's long-term plan to strengthen the Canadian economy. The 2013 plan introduced a new 10-year funding commitment to provincial, territorial and municipal infrastructure, starting in 2014–2015, through three key funds:

- Community Improvement Fund – C\$32.2 billion consisting of an indexed Gas Tax Fund and the incremental Goods and Services Tax (GST) Rebate for Municipalities to build roads, public transit, recreational facilities and other community infrastructure across Canada
- New Building Canada Fund – C\$14 billion in support of major economic infrastructure projects that have a national, regional and local significance.
- Renewed P3 Canada Fund – C\$1.25 billion to continue supporting innovative ways to build infrastructure projects faster and provide better value for Canadian taxpayers through public-private partnerships.

Further, an additional C\$6 billion in federal support will be provided to provinces, territories and municipalities under current infrastructure programs in 2014–2015 and beyond. This brings total federal investments in provincial, territorial and municipal infrastructure to approximately C\$53.5 billion from 2014–2015 to 2023–2024.³²

Le Nord pour tous (The North for everyone)

Launched in May 2011 by the government of Québec, the Le Nord pour tous is a sustainable development program for northern Québec that establishes the framework for the long-term economic and social development of the region. Northern Québec covers approximately 72 percent of Québec's territory. The Le Nord pour tous will be deployed over the next 25 years through a series of phases and is expected to lead to C\$80 billion (US\$78 billion) in public and private investments. Of the total private and public investment envisaged under this program, C\$47 billion is to be directed towards development of renewable energy and C\$33 billion towards development of the mining sector and public infrastructure, such as roads and airports. The first Five-Year Plan covering the period between 2011 and 2016 provides for C\$1.193 billion in infrastructure investments.^{33, 34, 35}

In May 2013, Montreal Premier Pauline Marois outlined more details about her government's economic vision for Québec's north, earmarking \$868 million to develop the vast territory over the next five years. Money from the fund will be used for roads, social housing, national parks and 'multifunctional' training centres. Québec will build 226 social housing units in Nunavik by 2016 at a cost of \$61 million. The government has created a northern development secretariat to oversee its investments and coordinate development in the region. Two major infrastructure projects for Québec's north have recently been put on ice because of weakness in global markets for iron ore.

On December 9, 2013, Québec agreed to adopt Bill 70, which will reform Québec's Mining Act, RSQ, c. M-13.1. The passage of Bill 70 constitutes a compromise among politicians in order to save the much-awaited reform of Québec's mining law. Although the new bill may not accommodate all of the demands of the interested parties, regulatory stability will be a first step in the right direction for achieving further predictability and certainty, which the industry certainly needs in the current economic environment.^{36, 37}

³² <http://www.budget.gc.ca/2013/doc/themes/infrastructure-eng.pdf>

³³ <http://www.stikeman.com/cps/rde/xchg/se-en/hs.xsl/15939.htm>

³⁴ <http://www.cbc.ca/news/canada/montreal/story/2013/02/09/plan-nord-protests-montreal.html>

³⁵ http://www.blakesfiles.com/Reports/2012_Plan_Nord_Mining_Journal_EN.pdf

³⁶ <http://www.gowlings.com/KnowledgeCentre/article.asp?pubID=3120>

³⁷ <http://www.osler.com/NewsResources/Québec-Finally-Adopts-its-Reform-of-the-Mining-Act>

Labour relations and employment situation

Labour laws in the country are quite stringent and are well regulated by both the federal and the provincial/territorial governments. Local laws cover 90 percent of the workforce while federal laws cover only 10 percent. Minimum hourly wage rates are well defined by the local laws. Mandatory retirement age has been relaxed by the federal government for people who wish to work beyond the retirement age. The WEPP Act entitles Canadians to demand payment of their wages, vacation, severance, and termination pay in case their employer goes bankrupt. The Employment Equity Act, a racism-free workplace strategy, pay equity – all these measures strive to promote zero discrimination against women, aboriginal people, persons with disabilities, and minorities.³⁸

According to Statistics Canada, the country's unemployment rate was 7.1 percent in December 2012 and the Canadian economy created 40,000 jobs in the month.³⁹

Employment in the mining sector is more volatile than in most other Canadian industries. Although the mining sector offers the highest wages among all industrial sectors in Canada, the average retirement age in the mining industry over the last 20 years has been 59.5 years, lower than the current national average of 62 years. The primary challenge for the sector is an aging workforce and poor representation of various demographic groups. Further, the representation of women in the industry is quite low (14 percent), compared with the labour force average participation rate in other sectors of the economy (47 percent). In the next decade, the industry is expected to create 100,000 new jobs as more and more old people exit the workforce and make way for the younger people.^{40, 41}

³⁸ Government of Canada highlights prohibition of mandatory retirement, Human Resource and Skill Development Canada, December 14, 2012

³⁹ Unemployment Rate Canada: December 2012, Sees Lowest Jobless Number In 4 Years, Huffington Post, January 4, 2013

⁴⁰ 2010: Employment and Hiring Forecasts, MIHR

⁴¹ Labour Market Trends, Mining HR Forecasts



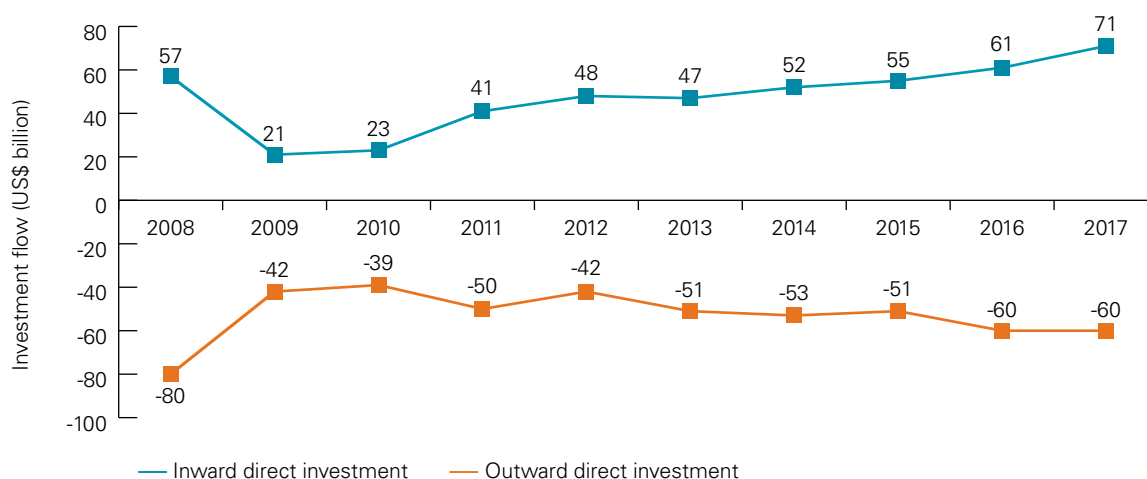


Inbound and outbound investment

Canada is one of the world's most attractive foreign investment destinations. Factors such as low corporate taxes, advanced R&D capabilities, duty-free manufacturing tariff regime, liberal policies encouraging foreign investment, NAFTA and free-trade agreements with many countries, political stability and prudent fiscal policies contribute to the country's favorable investment climate.⁴²

In 2008, inward direct investment flow to Canada reached a record US\$57.2 billion, before dropping to US\$21.4 billion in 2009, impacted by the financial crisis. Since then, it has recovered well because of strong investment inflows from Europe and the US, and it is estimated to have reached US\$47.9 billion in 2012.⁴³

Figure 1: Trend for inward and outward direct investment in Canada, US\$ billion



Source: Economist Intelligence Unit

The Canadian mining sector is getting record investments. In 2011, capital investment in the mining sector reached a record CAD12.5 billion in 2011. Canada's mining sector is expected to witness CAD130 billion investments by 2016, according to the Mining Association of Canada.^{44, 45}

⁴² The Canadian FDI climate, 2012, Area Development Online

⁴³ Canada Country Profile, EIU, Accessed on December 28, 2012

⁴⁴ Website of Natural Resources Canada Accessed on January 4, 2013

⁴⁵ Canada's mines to get \$130bn in investments by 2016 – MAC, Mining Weekly, August 25, 2011



Key commodities – production and reserves

Production level of key commodities in Canada

Canada is endowed with significant natural resources, producing more than 60 minerals and metals. The country is the world's largest producer of potash and the second-largest producer of uranium after Kazakhstan. The country is also a major producer of nickel, cobalt, titanium concentrate, aluminum, magnesium, platinum group metals, gypsum, asbestos, cadmium, zinc, salt, molybdenum, and diamonds. The overall production value of the Canadian mining industry reached CAD50.3 billion in 2011, up about 21 percent year-over-year. Over the past five years, the minerals and metals sector has contributed close to 5 percent per year to the country's GDP.

In 2010, the country had a total of 968 mining establishments, with 71 metal mines and 897 non-metal mines. According to InfoMine, Canada has the world's second-largest mining supply sector after the US, with 3,215 mining suppliers (2010).^{46, 47, 48}

Gold

Canada is the world's 8th largest producer of gold, producing 107.7 tonnes – or 3.82 percent of world production – of gold in 2011, worth some US\$5,441,643,686. In terms of listings, Canada is home to more of the world's 'Top 100' mining companies (19) than any other country. China (17) follows then Australia and the United States (11 each) and South Africa (9). Its gold production has, however, been on a downward trajectory in recent years. According to a 2011 report, net mining revenues for gold decreased from \$309 million in 2009 to \$224 million in 2010, a decrease of 28 percent.⁴⁹

Nickel

Canada is one of the world's top five nickel-producing countries. Companies are exploring for the metal in most of the nation's provinces, but the largest nickel deposits are the Thompson Nickel Belt in Manitoba, Ontario's Sudbury Basin and the Ungava Peninsula in Québec. Nickel was first discovered in Canada in 1883, but the ore was not properly mined until the 1890s, according to the Canadian government. Currently, the majority of Canada's nickel supply comes from the Sudbury Basin.⁵⁰

⁴⁶ 2011 Facts and Figures, MAC

⁴⁷ Canada Mineral Production, Natural Resource Canada, 2011

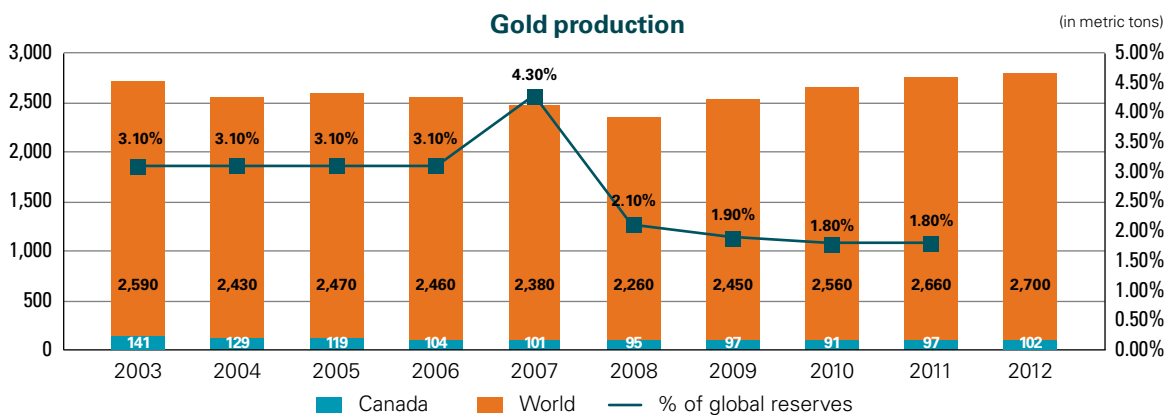
⁴⁸ Canada's Mining Industry, Government of Canada

⁴⁹ http://www.goldfacts.org/en/economic_impact/countries/canada/

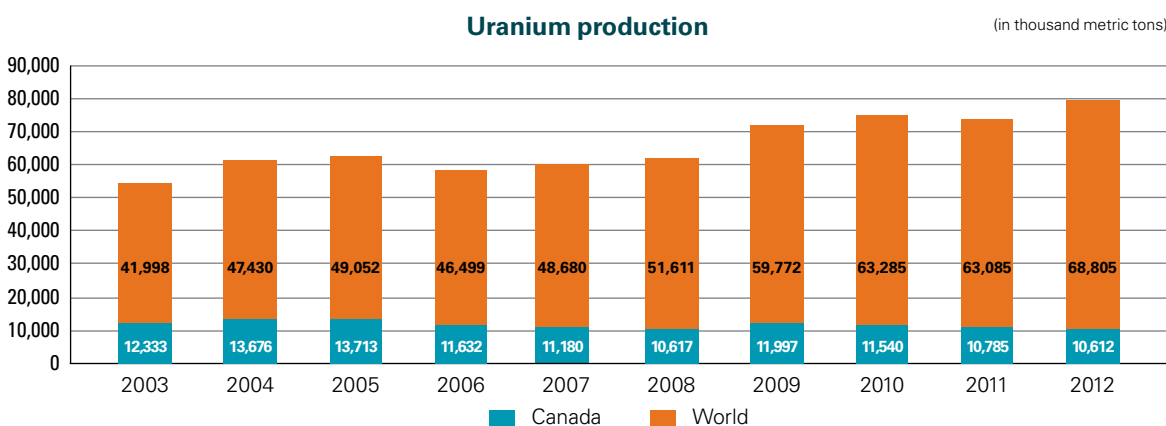
⁵⁰ <http://nickelinvestingnews.com/5432-nickel-mining-canada-vale-xstrata-prophecy-platinum.html>



Figure 2: Production level and % Share of Global Reserves of key commodities in Canada



Source: US Geological Survey, Mineral Commodity Summaries

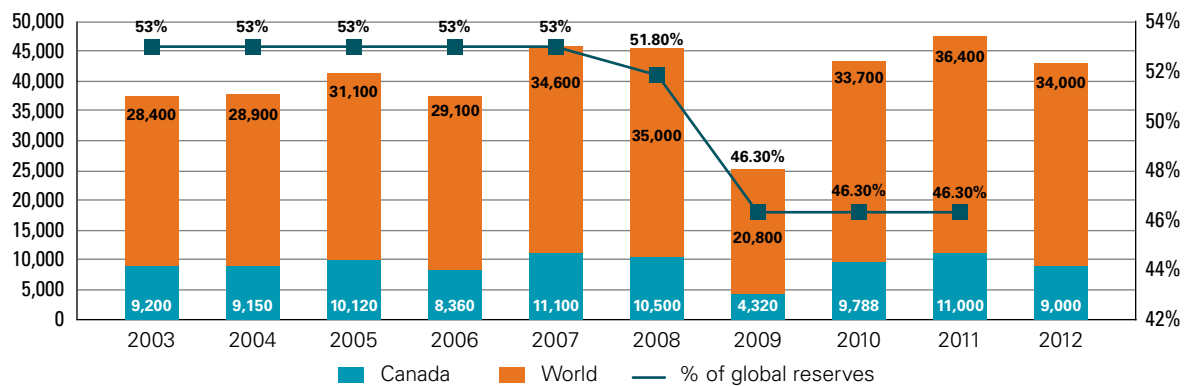


Source: World Nuclear Association



Potash production

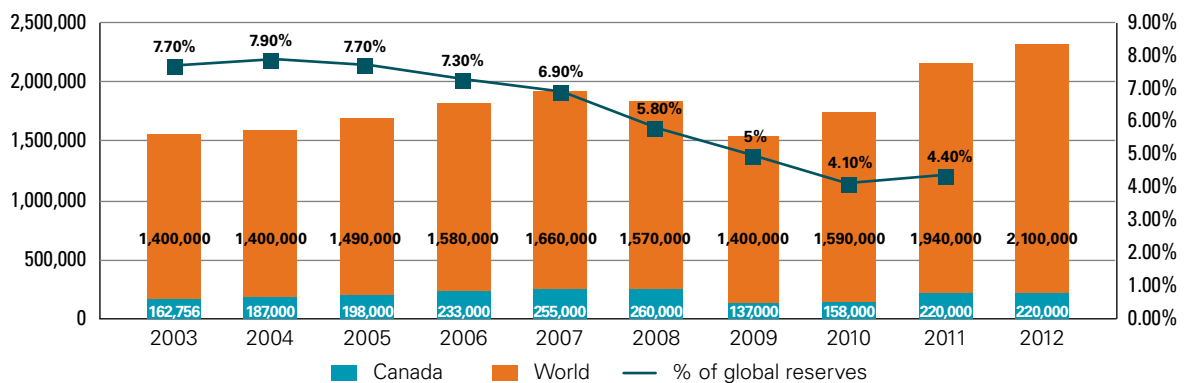
(in thousand metric tons)



Source: US Geological Survey, Mineral Commodity Summaries

Nickel production

(in thousand metric tons)



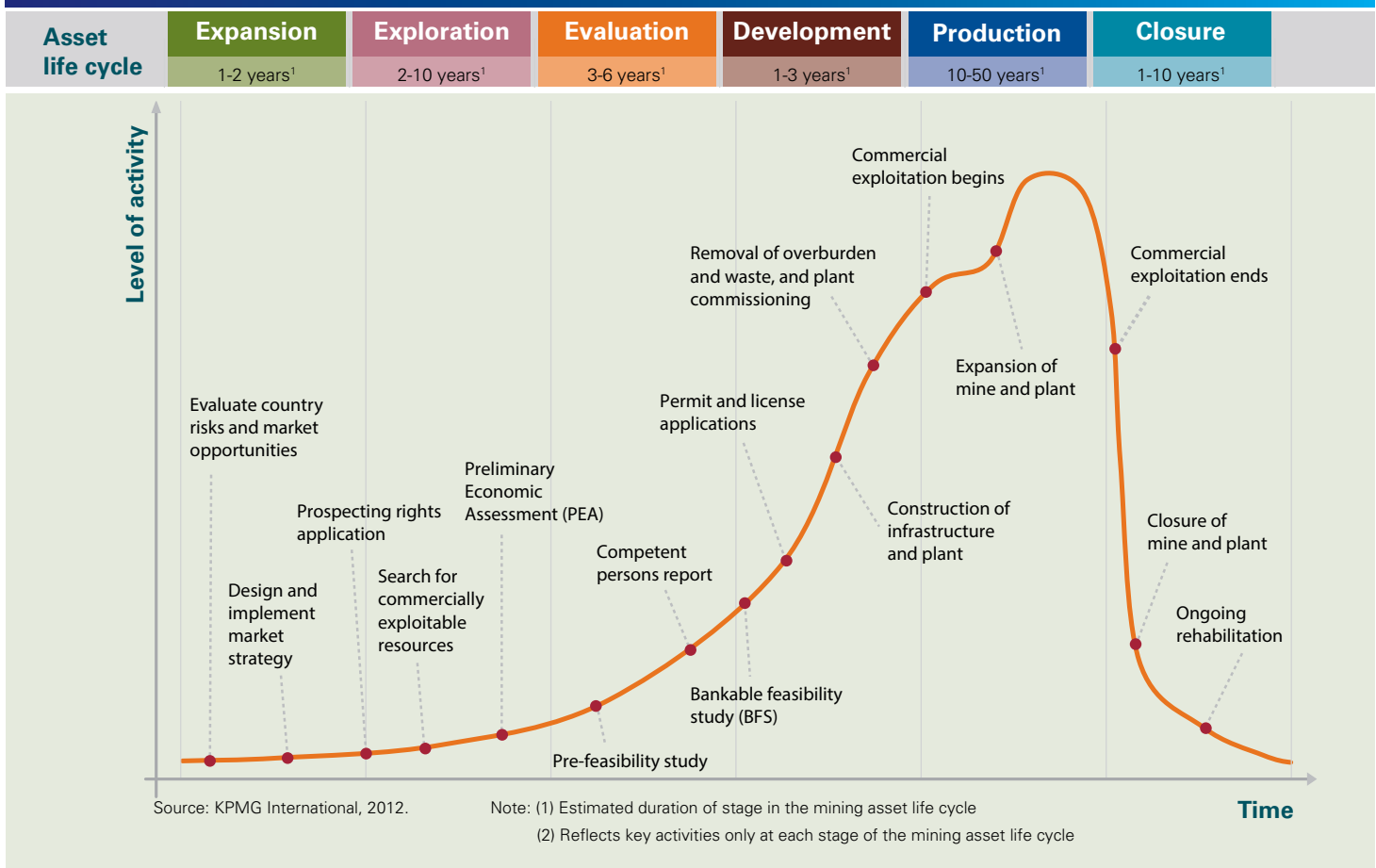
Source: US Geological Survey, Mineral Commodity Summaries

Major mining companies in Canada⁵¹

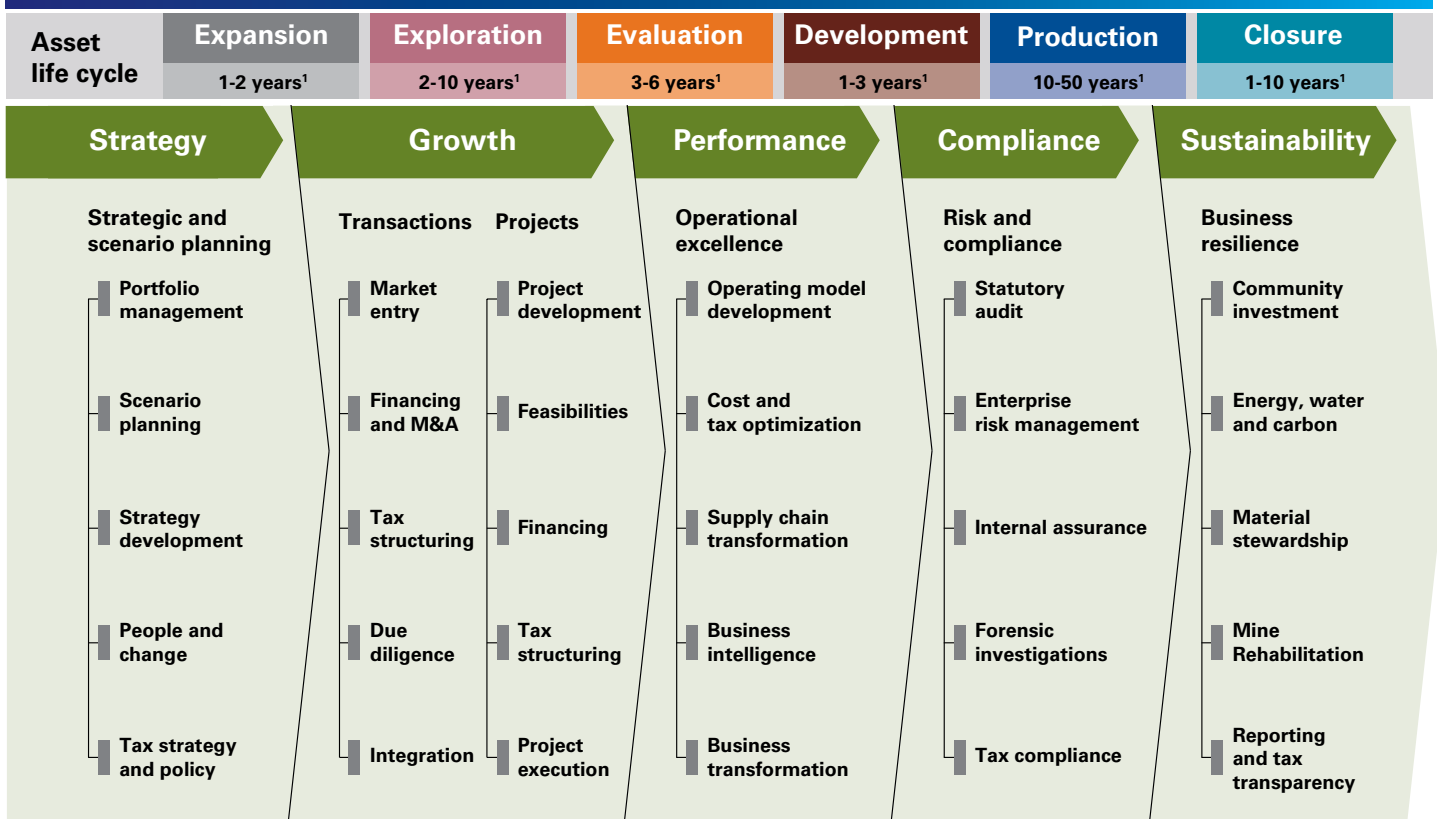
- 5N Plus Inc.
- Agnico-Eagle Mines Limited
- Alacer Gold Corp.
- Alamos Gold Inc.
- Alcoa Canada Ltd.
- ArcelorMittal Canada
- Aura Minerals Inc.
- Barrick Gold Corporation
- Cameco Corporation
- Canadian Salt Co. Ltd.
- Capstone Mining Corp.
- Centerra Gold Inc.
- China Gold International Resources Corp. Ltd.
- Dominion Diamond Corp.
- Dundee Precious Metals Inc.
- Eldorado Gold Corporation
- First Quantum Minerals Ltd.
- Franco-Nevada Corporation
- Goldcorp Inc.
- Golden Star Resources Ltd.
- HudBay Minerals Inc.
- IAMGOLD Corporation
- Iron Ore Company of Canada
- Katanga Mining Ltd.
- KGHM International Ltd.
- Kinross Gold Corporation
- Lundin Mining Corporation
- MFC Industrial Ltd.
- Nevsun Resources Ltd.
- New Gold Inc.
- Noranda Income Fund
- OceanaGold Corporation
- Osisko Mining Corporation
- Pan American Silver Corp.
- Potash Corp. of Saskatchewan Inc.
- Rio Alto Mining Ltd.
- Rio Tinto Alcan Inc.
- SEMAFO Inc.
- Sherritt International Corporation
- Silver Wheaton Corp.
- Teck Highland Valley Copper
- Teck Resources Limited
- Teranga Gold Corp.
- Thompson Creek Metals Company Inc.
- Uranium One Inc.
- Vale Canada Ltd.
- Western Coal Corp.
- Yamana Gold Inc.

⁵¹ 2013 Market share data: FP800, RoB1000, RoB350

Mining asset life cycle

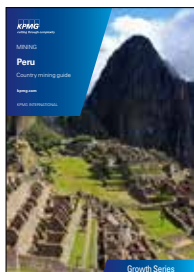


KPMG's mining strategy service offerings



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Country mining guides

This series of country guides provides an overview of the mining industry from a geographical, economic and legislative context. These country guides are invaluable for those already operating or considering an investment in the country. Published country guides include Brazil, Chile, Mexico, Mozambique, Peru and Zambia.

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Growth in a time of scarcity: Managing transactions in the mining sector

A combination of demand from the East, dwindling mineral resources and rising costs is reshaping the mining sector. As mining companies attempt to manage their asset life cycle in this

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KPMG member firms have developed their own operational excellence framework over the last several years of association with leading mining companies. It helps organizations begin a journey of efficiency and then, over time, embeds such characteristics

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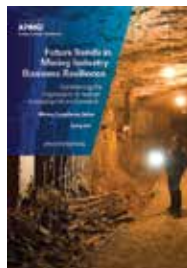


From volume to value: Cost optimization in the mining sector

This report looks at nine different levers which mining companies need to consider when implementing cost optimization programs to sustain profitability in today's more challenging economic environment.

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It is this local knowledge, supported and coordinated through KPMG's regional mining centres, which ensures our clients consistently receive high-quality services and the best available advice tailored to their specific challenges, conditions, regulations and markets. We offer global connectivity through our 13 dedicated mining centres in key locations around the world, working together as one global network. They are a direct response to the rapidly evolving mining sector and the resultant challenges that industry players face.

Located in or near areas that traditionally have high levels of mining activity, we have centres in Melbourne, Brisbane, Perth, Rio de Janeiro, Santiago, Toronto, Vancouver, Beijing, Moscow, Johannesburg, London, Denver and Mumbai. These centres support mining companies around the world, helping them to anticipate and meet their business challenges.

For more information, visit

www.kpmg.com/miningamericas

Mining Centers







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