



Mexico country mining guide

KPMG Global Mining Institute

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Executive summary

With a land area among the larger countries of the world, and a temperate year-round climate, Mexico has large reserves of accessible mineral wealth. The country is the largest producer of silver in the world. In addition, it ranks among the top 10-world producers of gold, fluorite, bismuth, celestite, wollastonite, lead, molybdenum, diatomite, cadmium, graphite, baryte, salt, gypsum, manganese and zinc. Moreover, Mexico has vast reserves of many minerals that remain unexploited.

Mexico plays a key role in the global Mining industry, in terms of revenue, production and reserves. The country is an ideal destination for mining investment, ranking behind the US, Canada and Australia in terms of investment attractiveness.

In recent years, Mexico's Mining sector has attracted some of the country's largest foreign and domestic investments. In 2014, investment in the sector was US\$5 billion, and is expected to top US\$5.4 billion in 2015. Moreover, investment is expected to rise in 2016, despite fluctuations in international prices for most metals.

Improving business environment

In recent years, Mexico's business environment has improved. This is primarily due to its privileged access to the US market, an increasing global network of free trade agreements (FTAs), an emerging middle class, and a large domestic market. The sectoral reforms, especially in Energy

and Infrastructure industry are deemed positive for the country, and communicate the "pro-business" stance of the government.

However, the country's economy has been affected by the following factors:

- Inadequate infrastructure
- Over-reliance on the US economy
- High crime rates
- Substandard education system
- Uncompetitive Energy and other Public sectors
- Inflexible labor markets

In the past, the regulatory framework for the Mexican Mining sector has been protectionist and unfavorable to foreign



1st

Mexico is the **largest producer of silver** in the world



15th

Mexico has a \$1.29 trillion economy, ranking it as the **15th largest economy** in the world



2nd

Mexico **ranked second in the EIU regional ranking**, which included **12 countries** from the Latin American region.



mining investment. However, in the eighties, Mexico began to implement significant economic changes that continued over the following decades. The regulatory framework was simplified to attract foreign investment and, as a result, private investment has become the driving force of the Mexican economy.

A mining-friendly jurisdiction

In the Mining sector, restrictions on foreign ownership of Mexican companies have been removed. Mining-specific royalties and taxes were revoked in the nineties to attract international investment in the Mining industry.

Current law requires mining companies to be incorporated under the laws of Mexico, include exploration or exploitation of minerals under their corporate purpose and establish their corporate domicile within Mexico.

The country retains ownership of all mineral resources and the government grants concessions to private mining companies for exploration and extraction.

In terms of taxation, mining companies in Mexico are treated similarly to companies in other sectors. Corporate income tax is levied at a rate of

30 percent. Post January 2014, a mining royalty equivalent to 7.5 percent of the concession holders' income derived from their mining exploitation activities is being levied.

Addressing the problems

The Mexican government is now focused on improving infrastructure. The country has many infrastructure opportunities, primarily in the power grid and road networks. The structural reforms introduced by the Enrique Peña Nieto government is largely viewed as a positive step toward boosting a sustainable economic growth.

With an estimated population of approximately 121.7 million (July 2015), Mexico is the 12th most populated country in the world. A lack of reform in the country's labor laws has often adversely affected the Mining industry. Worker unions are strong in the Mining sector, and frequently demand better benefits and salary increases. Illegal work stoppages are common. Recently, the Mexican government implemented some changes to the labor law that provides employers more flexibility in hiring and firing workers. In November 2012, Mexico's Congress approved broad changes to the country's labor law, to encourage small businesses to hire workers.





Country snapshot

Mexico¹

Location Mexico is located in North America that borders the Caribbean Sea and the Gulf of Mexico, between Belize and the US and bordering the North Pacific Ocean, between Guatemala and the US.

Geography Mexico is a federal constitutional republic located in the continent of North America. It is the 14th largest country in the world by area.

Located at (23 00 N, 102 00 W), and spread over 1,964,375 square kilometers, Mexico borders the US to the North, Belize and Guatemala to the south, the Gulf of Mexico to the east and the North Pacific Ocean to the west.

Climate The climate in Mexico varies according to the topography, from tropical to desert. It is hot and humid along the coast. Inland communities at higher elevations are much dryer and more temperate.

Population With an estimated population of approximately 121.7 million (July 2015), Mexico is the 12th most populated country in the world. Mexico's population is relatively young with a median age of 27.6 years. In terms of demographics, the country's population comprises indigenous groups and early Spanish immigrants.

Currency The official currency of Mexico is the Mexican Peso (MXN). Banco de Mexico, the country's central bank is responsible for providing domestic currency to the Mexican economy and ensuring the stability of the peso's purchasing power.

Average exchange rate in 2015 were:²

— MXN15.8671: US\$1

— MXN17.7072: EUR1

¹ CIA Factbook, accessed on January 29, 2016

² Interbank historical average over January 1, 2015 to December 31, 2015 from Oanda, accessed on January 29, 2016

EIU (Economist Intelligence Unit) rankings: ease of doing business

Within the EIU business environment ranking for 2015–2019, Mexico ranked 32nd amongst the 82 countries, rising one place from the previous ranking of 33 in the 2010–2014 period.

The country ranked second in the regional ranking, which included 12 countries from the Latin American region.

Mexico's privileged access to the US market, integration into the latter's manufacturing supply chains, an extensive network of free-trade agreements and a large internal market make it one of the most attractive investment locations among emerging markets.

However, high input costs, an inefficient labor market, insecurity, corruption and a complex tax system (notwithstanding a 2014 fiscal reform) have slowed the overall economic environment.

The government has made a good start on tackling some of these structural flaws, by means of reforms. Nevertheless, there remain certain risks relating to their effective implementation owing to institutional weaknesses and more adverse market conditions in the Energy sector (the focus of the most attractive reform by far), as a result of the fall in oil prices.

However, the country's economy is still plagued by some problems related to infrastructure; reliance on the US economy; crime rates; education system; uncompetitive energy and other public sectors; and inflexible labor markets.

Value of Index ^a		Global Rank ^b		Regional Rank ^c	
2010–2014	2015–2019	2010–2014	2015–2019	2010–2014	2015–2019
6.88	7.05	33	32	2	2

Note a. Out of ten

Note b. Out of 82 countries.

Note c. Out of 12 countries: Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Mexico, Peru and Venezuela.

Source: Economist Intelligence Unit

Type of government

Mexico is a federal republic (also called a federation). At the federal level, the Mexican government has three branches: executive, legislative and judicial.

The president is the nominal head of the country and leads the executive branch and the armed forces. A direct popular vote for a six-year term elects the president, who cannot be re-elected.

The Legislative branch of the Mexican government is bicameral, with the chamber of representatives and the chamber of the senate comprising 500 and 128 members, respectively. Members of the lower house serve for three-year terms, and senators serve for six years. These two houses pass laws, approve spending and budget bills, declare war on other countries, and approve presidential appointments.

The Judicial branch of the Mexican government has a High Court, the Supreme Court of Justice and several

other courts and tribunals, including district courts that oversee various parts of the country. The Supreme Court can rule on specific cases only, not on broad constitutional issues.

Mexico has 32 states and a federal district, which constitute its administrative divisions. The federal district houses the federal government. Each state is considered a sovereign entity and is free to make its own constitution, with which it can govern its relations with other Mexican states but not with other countries.

The local level of the Mexican government comprises more than 2,400 municipalities. Each municipality has a president and a council.^{3, 4}



³ Wisegeek, accessed on January 28, 2016

⁴ CIA Factbook, accessed on January 28, 2016



Economy and fiscal policy

Economy

Mexico has a \$1.29 trillion economy, ranking it as the 15th largest economy in the world, and the 12th in terms of power purchasing parity (PPP). Based on these rankings, Mexico is a “middle power,” falling just short of being a G7 economy and ranking as an economic power.

With its 125.4 million inhabitants, the country’s GDP per capita is approximately \$10,348, ranking Mexico firmly in the “upper middle income” countries. Adjusted for purchasing power, the GDP per capita is about 70 percent higher, at \$17,145, which ranks the country in the same league with Turkey, Romania, and Brazil, but still far below countries such as the US (\$55,000) or Switzerland (\$58,000).

Economic growth is forecast to rise 3.1 percent annually over 2016–2020, slightly less than the 3.4 percent annual growth in 2010–2014, the years following the global financial crisis of 2008–2009. Before that, growth averaged about 4–5 percent per year.

The government of Enrique Peña Nieto, which came to power in December 2012, has been pressing ahead with what has been seen by many as an “ambitious reform agenda.” This

includes an overhaul of the taxing system, cuts in government spending, and the liberalization of certain economic sectors such as energy and telecommunications.

Mexico is traditionally seen as a commodities and manufacturing giant. It has the largest proven silver reserves in the world, and the tenth largest oil reserves. PEMEX, the state-owned oil company, is one of the largest oil producers in the world, with revenues of approximately \$130 billion.

Due to rising wages and less favorable trade terms in other countries including China, Mexico recently gained competitiveness as an automobile exporter. Large automotive companies such as Volkswagen, Toyota, Nissan, Ford, General Motors and Fiat Chrysler have increased their production in Mexico recently, or have announced their intentions to do so.

Mexico’s membership of the North American Free Trade Association (NAFTA) has enabled the country to become one of the largest trade partners of the US. Mexico exports mostly manufactured goods, industrial goods and automobiles. It has a positive trade balance with the US, and consequently, has become one of the largest holders of US treasury bonds.

Mexico became the first Latin American country to enter the Organisation for Economic Co-operation and Development (OECD) in 1994. It was later joined by Chile. Colombia is in talks to join the OECD as well. Jose Angel Gurria (a Mexican) is the current President of the OECD.

Mexico is the OECD country with the second highest degree of economic disparity between the rich and the poor, behind Chile. The bottom 10 percent on the income rung disposes of 1.36 percent of the country's resources, whereas the upper 10 percent dispose of almost 36 percent. Twenty-six percent of GDP comes from the informal economy, a part of the economy in which almost 60 percent of the workforce is active.^{5, 6}

Policy issues

Conservative fiscal and monetary policies underpin macroeconomic stability; however, the weakness of the non-oil fiscal revenue base and the shallowness of credit markets leave the authorities with few tools at their disposal to boost demand. The pace of reform has accelerated markedly under Mr. Peña Nieto, with the adoption of transformative

structural reforms in 2013–2014, including in the Energy, Education and Telecommunications sectors. Persistent constraints on growth include lack of competition in the internal market and a deficient education system, as well as institutional flaws resulting in rampant corruption across all levels of government and limited progress in curbing high levels of crime.⁷

Taxation

The corporate tax rate stands at 30 percent, while the top rate of personal income tax was increased to 35 percent as part of the recent fiscal reform. Depreciation allowances range from 5 percent to 25 percent, but can be up to 50 percent on pollution-control equipment. The value-added tax (VAT) rate is 16 percent throughout the country (a lower border rate has been eliminated); food products and medicines remain exempt from VAT, although a junk-food tax has been introduced for products with high calorific content. Additional changes to various tax regimes, which affect conglomerates and 'maquila' (domestic assembly for re-export) firms, have also come into effect.⁵

Monetary policy outlook

The Banco de México (Banxico, the central bank) will see its dovish stance challenged by a weak peso, but will benefit from the historically low levels of inflation in recent months.

The monetary policy rate currently stands at 3 percent, and based upon analyst baseline forecast, an expected tightening cycle will be largely synchronized with that of the US.

However, Banxico is likely to delay this if the economy continues to underperform. On the banking side, overall private credit penetration remains low, as most central government and state-level spending is financed through the domestic banking system, leading to some crowding-out of small and medium-sized borrowers.

This situation will improve gradually over the 2016–2020, owing to a recently passed banking reform that seeks to increase lending through greater competition in the financial system.⁸

⁵ World Economic Forum, May 5, 2015

⁶ CIA Factbook, accessed on January 28, 2016

⁷ EIU Country Profile accessed on January 28, 2016

⁸ Monetary policy outlook: EIU, published December 4, 2015

Fraser institute rankings

Economic freedom of the world 2015 report

Among the 157 countries covered by the Fraser Institute's Economic Freedom of the World 2015 Report, Mexico ranked 93rd, with a score of 6.79 on a scale of 10.

This annual peer-reviewed report ranks countries, based on their policies that enable 42 different economic measures in the following areas:

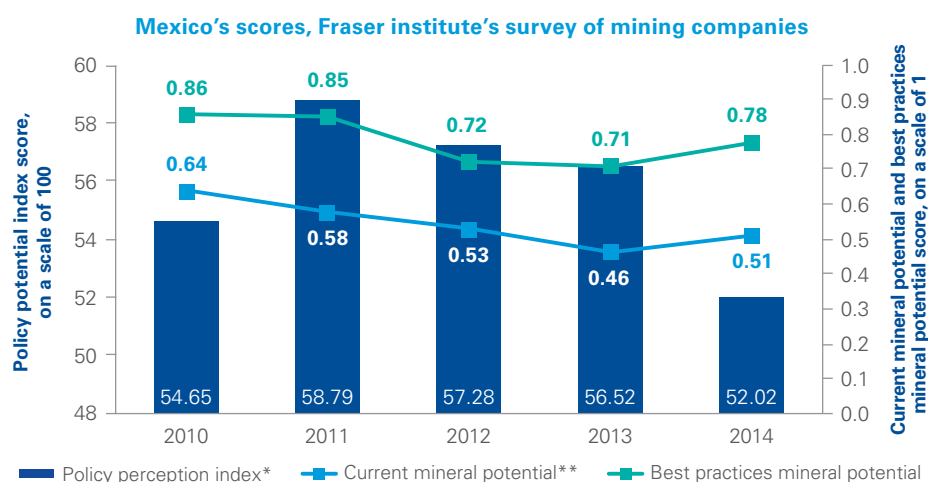
- Size of government – expenditures, taxes and enterprises
- Legal structure and security of property rights
- Access to sound money
- Freedom to trade internationally
- Regulation of credit, labor and business

Survey of mining companies 2014

Mexico ranked 56th on Policy Perception Index by the Fraser Institute's Survey of Mining companies 2014. Mexico's rank in the yearly survey of the index has consistently deteriorated since 2010.

The country has slipped down in the rankings on the Current Mineral Potential Index, with a ranking of 31 (out of 122) in 2014 from a rank of 15 (out of 79) in 2010.

Figure 1: Mexico's scores, Fraser institute's survey of mining companies 2014



Note *: The Policy Perception Index is a composite index that measures the effects on exploration of government policies

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.

Note ***: The Best Practices 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

In Mexico, the Mexican Mining Law, originally published in June 1992, regulates all mining activities. This federal mandate governs the use, expiration and cancellation of mining concessions. Under the law, all minerals found in the Mexican territory are owned by the country, and private parties may exploit these minerals (except oil and nuclear fuel minerals) through a concession granted by the federal government.

While most of the key areas of essential infrastructure in Mexico are state-controlled, over the past two decades Mexico has modernized its legal framework to allow domestic and foreign private participation in transportation, electric power, water and communications under privatization, concession and public private partnership (PPP) schemes. These reforms have created an environment that is more conducive to investment in infrastructure projects.

The Ministry of the Economy exercises its authority on mining companies through General Coordination of Mines, which in turn relies on the General Bureau of Mines. The Bureau, through

its various subordinate agencies, administers the country's mining law, with respect to concessions, allotments and national mining reserves.

Federal law regulates mining activities in Mexico. Under Mexico's Federal Constitution, the direct ownership (essentially) of all minerals resides in Mexico. The Federal Constitution sets forth the legal grounds for the

Mexican territory are owned by the country, and private parties may exploit these minerals (except oil and nuclear fuel minerals) through a concession granted by the federal government.

involvement of Mexican entities and individuals in mining exploration and exploitation activities through mining concessions granted by the federal government.

Other laws and regulations govern specific mining-related matters, including the environment, water supply, labor matters, foreign investment, land use rights, use of explosives, etc.

Foreign direct investments (FDI)

Under Mexican law, mining concessions can only be granted by the Ministry of Economy to Mexican nationals (individuals or companies), ejidos⁹, agrarian and Indian communities.

To be legally qualified to hold title to a mining concession, companies must be organized under the laws of Mexico and their corporate purpose must include the exploration or exploitation of minerals.

Foreign investment in Mexican companies holding mining concessions is subject to the provisions of the Foreign Investment Law. Foreign investors are permitted to acquire up to 100 percent of the capital stock of Mexican entities holding mining concessions, as long as such investors agree with the Ministry of Foreign Affairs to be treated as Mexican citizens in respect of their equity participation in the concession holder.

⁹ Ejido is an area of communal land used for agriculture, on which community members individually farm designated parcels and collectively maintain communal holdings.



Duties, taxes and royalties

In terms of taxation, mining companies in Mexico are treated similarly to companies in other sectors. Corporate income tax is levied at a rate of 30 percent.

Any person seeking to obtain a mining concession must pay application fees to the Mexican government. After granting mining concession by the Ministry of Economy, concession holders are required to pay mining duties during the life of the concession. Mining duties are payable to the federal government in January and July of each calendar year. The amount of mining duties is assessed based upon the size (number of acres) of the mining lot and must be paid in Mexican pesos. A concession holder's failure to pay mining duties may result in the cancellation of the mining concession.

The Federal Duties Law (Ley Federal de Derechos), which amended in January 2014, and provides for an annual mining royalty (*derecho especial de minería*) equivalent to 7.5 percent of the concession holders' income derived from their mining exploitation activities after permitted deductions, excluding investments different from those made in connection with exploration

activities, financial costs and taxes. This mining royalty is assessed in respect of concessions already being exploited by their holder and is payable to the federal government in January and July of each calendar year.

Additionally, holders of gold, silver or platinum mining concessions must pay an extraordinary annual mining royalty (*derecho extraordinario de minería*) equivalent to 0.5 percent of all revenues arising exclusively from the sales of such minerals.

Holders of mining concessions that have suspended exploration or exploitation works during two years within an eleven-year-period from the granting of the mining concession would pay an additional mining royalty (*derecho adicional sobre minería*) equivalent to 50 percent of the applicable mining duties payable by concession holders from the twelfth year of the effectiveness of their mining concessions.

Such royalty is assessed based upon the size of the mining lot. Concession holders shall increase it to 100 percent of the mining royalty payable from the twelfth year of the effectiveness of the mining concession, if the concession holder has not undertaken exploration

and exploitation works within two years after the twelfth year of the effectiveness of the mining concession. These royalties are payable to the federal government in January and July of each calendar year.

Furthermore, under the Mining Law, holders of mining concessions awarded pursuant to a public bid process must pay a royalty (*prima por descubrimiento*) or an economic consideration (*contraprestación económica*), during the life of the concession. The royalty of economic consideration are paid to the Mexican Geologic Service (*Servicio Geológico Mexicano*) and a federal government agency in charge of conducting research and identifying the potential mineral resources of the country.

This royalty or economic consideration is determined by the Ministry of Economy on a case-by-case basis at its discretion, and is calculated as a percentage of the invoice value of the minerals extracted and sold under the relevant mining concession.

Under Mexican law, mining duties may be paid by the concession holder or by a third party having an interest on such payment.^{10, 11}

¹⁰ Mexico Mining Legislation, ICLG, accessed on January 28, 2016

¹¹ Latin Lawyer – Mining 2015, accessed on January 28, 2016

Sustainability and environment

Mexican environmental regulations have become increasingly stringent over the last decade because of international agreements that Mexico has ratified, including North American Agreement on Environmental Cooperation (parallel to NAFTA), the UN Framework Convention on Climate Change and the Convention on Biological Diversity.

The country's federal government works toward sustainable development and environmental protection through the Ministry of Environment and Natural Resources

'Secretariat of Environment and Natural Resources (Spanish: Secretaría del Medio Ambiente y Recursos Naturales, SEMARNAT).

SEMARNAT aims toward the following targets:

- Conservation of ecosystems and their biodiversity
- Prevention and control of pollution
- Management of water resources
- Actions toward climatic change

In Mexico, mining companies must follow the environment regulations laid out by the Mexican Secretariat of Labor (STPS) and SEMARNAT.

Mining companies must obtain environmental impact permits from SEMARNAT prior to any mining and exploration activities, and such activities are subsequently subject to several

Major mining companies in Mexico have started to invest in auxiliary areas of environmental responsibility, such as reforestation projects, environmental audits and certification, and residual management systems, among others.

environmental permits from different offices with SEMARNAT, including water extraction, wastewater discharge and tailings disposal.

Under the Mexican Mining Law, concessionaires must adhere to federal environmental regulations, and their activities are subject to an environmental review. All mining companies are required to prepare and file an environmental impact statement for all extractive operations as well as non-standard exploration work.

Regulatory authorities must approve this environmental impact statement.

Surface exploration activities generally have a very low environmental impact. If an exploration project conforms to the NOM-120-SEMARNAT-1997 (Norma Oficial Mexicana NOM-120-SEMARNAT, 1997 [1998]), SEMARNAT does not require a permit to conduct

low impact surface work such as drilling. In practice, although not required under the NOM-120, many companies submit an "Informe Preventivo," a report that states the measures that will be used by the company to minimize environmental impacts.

With environmental issues becoming key issues in the Mining sector, SEMARNAT is introducing environment-friendly policies for the industry. Major mining companies in Mexico have started to invest in auxiliary areas of environmental responsibility, such as reforestation projects, environmental audits and certification, and residual management systems, among others.^{12, 13, 14}

¹² Website of SEMARNAT, accessed on February 1, 2016

¹³ Website of Almaden Minerals, Fresnillo, and First Majestic Silver Corp, accessed on February 1, 2016

¹⁴ Mexico Mining Review 2015, accessed on February 1, 2016



Power supply

As per the official data provided by Secretaría de Energía de México (SENER), Mexico had an effective generation capacity of 54.4 gigawatts (GW) and country generated an estimated 258 billion kilowatt-hours (kWh) of electric power in 2014. This represents an increase of nearly 25 percent over 2005–2014. Power plants using fossil fuels provide 78 percent of Mexico's electricity capacity and generation. The Industrial sector accounts for 58 percent of Mexico's electricity sales, while the Residential sector is responsible for slightly more than one quarter of electricity sales.

The National Energy Strategy outlined by SENER and the Works and Investment Program of the Electricity Sector (POISE) set up by CFE set a goal to generate 35 percent of electricity from non-fossil sources by 2024. Non-fossil generation accounted for 22 percent of Mexico's electricity supply in 2014.

The state-owned Comisión Federal de Electricidad (CFE) is the dominant player in the Generation sector, controlling more than three-quarters of Mexico's installed generating capacity. CFE also holds a monopoly on electricity transmission and distribution. However, international companies, such as Mitsubishi, Intergen, AEC, Iberdrola, Transalta and Union Fenosa, are now participating

as independent power producers (IPPs) in Mexico.

Mexico had 16,295 MW of total renewable installed capacity as of 2014, predominantly in hydroelectric, wind, solar photovoltaic (PV) and geothermal capacity. Non-hydro renewables such as wind, geothermal, and solar PV, represented 3 percent of Mexico's electricity generation in 2013. In 2014, Mexico had 980 MW of geothermal capacity, ranking the country fifth in terms of global geothermal capacity.

Mexico also has a tremendous potential for harnessing wind power. Mexico's plan to increase its wind power capacity makes it the fastest growing wind energy market among the top 20 economies of the world.

Several wind projects are in development in Mexico's Baja California and in Southern Mexico with the aim of boosting Mexico's wind generation capacity from 2 GW to 12 GW by 2020. Mexico is hoping to achieve this goal by encouraging \$14 billion in investment between 2015 and 2018.

With these developments, Mexico is poised to become one of the world's fastest-growing wind energy producers; however, Mexico's domestic transmission infrastructure must be updated if the country is to capitalize on this increasing potential.^{15, 16, 17, 18, 19}

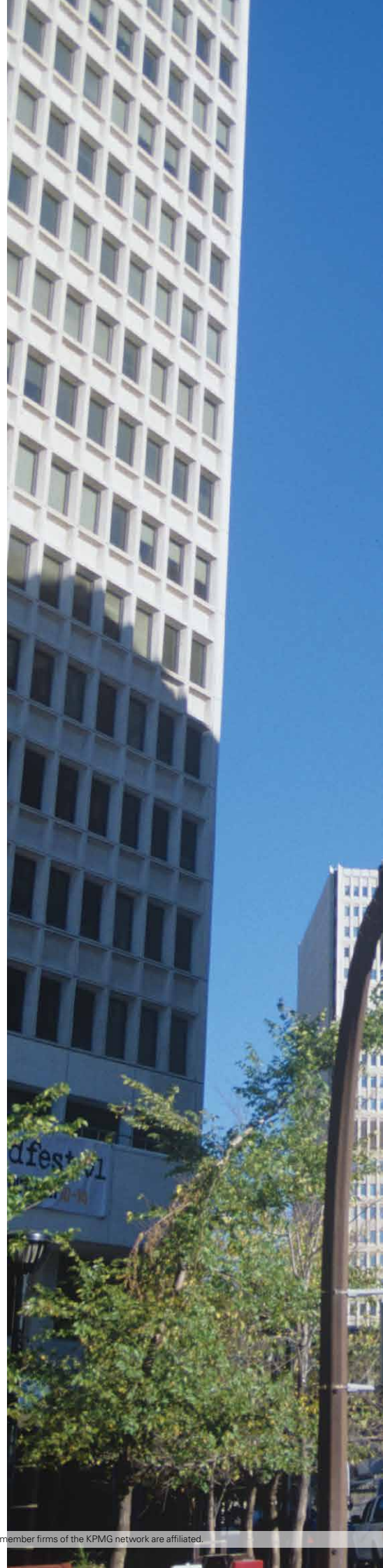
¹⁵ Website of SENER, accessed February 2, 2016

¹⁶ US Energy Information Administration – Mexico energy data and analysis, accessed on February 2, 2016

¹⁷ Energy Factsheet – US Embassy – Mexico City, accessed on February 2, 2016

¹⁸ CFE Annual Report 2014, accessed February 2, 2016

¹⁹ Renewable Energy Roadmap (REmap 2030) – published by SENER in May 2015, accessed on February 2, 2016





Infrastructure development

Mexico currently ranks 64 out of 148 countries in terms of infrastructure, according to the Global Competitiveness Index of the World Economic Forum. Economists agree that Mexico's prospects for becoming a truly industrial economy will remain limited unless the country accelerates its construction of the roads, railroads, ports, energy plants and other physical infrastructure essential in any modern industrial economy.

The Mexican government focuses on improving infrastructure. The country has many infrastructure opportunities, primarily in power and road networks. With this goal in mind, the Mexican government published its National Infrastructure Program for 2014–2018 (Programa Nacional de Infraestructura 2014–2018 (PNI)), in April 2014.

The country has many infrastructure opportunities, primarily in power and road networks.

PNI is a comprehensive array of projects that would cost the Public and Private sectors a combined total of about \$600 billion. Under the program, Mexico expects to upgrade its Transportation; Communications Networks; Energy (power, oil and gas); Water; Health Care; Urban Development and Housing; and the Tourism Infrastructure sectors.

However, infrastructure development in Mexico faces various challenges, such as variable creditworthiness of state governments, which discourages

investors from participating in PPP projects. Another major challenge is the lack of multi-annual budgets, which affects PPP contracts at the local level.^{20, 21, 22}

²⁰ US Trade and Development Agency infrastructure project guide, accessed on February 2, 2016

²¹ Mexico: Structural Reforms on Energy and Infrastructure. What's Next? – EMPEA (Emerging Markets Private Equity Association)

²² The Mexican mining industry: Pro Mexico Trade and Investment, accessed on February 2, 2016

Labor relations and employment

Social and economic rights for workers were written directly into Mexico's constitution of 1917. The Federal Labor Law and the Federal Social Security Law, which set the rules for labor relations, labor unions and labor courts, govern labor issues in Mexico.

Although the labor laws – on paper – provide protection for workers and unions, their enforcement has been questionable. Historically, labor unions and their negotiations have been controlled by the government as part of a larger strategy for economic development. This has often resulted in clashes between the government and labor unions, due to the government's focus on competition and foreign investment, which often comes at the cost of labor rights and working conditions.

In the Mexican Mining sector, labor unions are strong, and frequently demand better benefits and salary increases. A lack of reforms in the country's labor laws has often adversely affected the Mining industry. Illegal work stoppages are common in

mining, which in the past has led to unemployment and uncertainty.

In spite of these factors, the Mexican Mining sector continues to be a prime target for foreign investment. Mexico is a favorable destination for mining investment, ranking only behind the US, Canada and Australia in terms of investment attractiveness. Moreover, the country has vast reserves of various minerals that remain unexploited. These factors are bound to increase the demand for skilled workforce in the sector.

In Mexico, nearly eight million young people are unemployed. The unemployment rate for the month of November 2015 was 4.1 percent, lower than 4.6 percent level registered in November 2014.

Recently, the Mexican government implemented some changes in labor law to give employers more flexibility in hiring and firing workers. In November 2012, Mexico's Congress approved broad changes to the country's labor law, to encourage small businesses to hire more workers.^{23, 24, 25}

²³ Comparative Labor Relations, Website of McGraw Hill Education accessed on February 2, 2016

²⁴ Mexico's unemployment rate falls to 4.1 pct. in November, Fox News, Published December 25, 2015

²⁵ Mexican Labor Year in Review (2015) – Solidarity, accessed on February 2, 2016

Inbound and outbound investment

In recent years, Mexico has witnessed a rise in foreign investment activity, particularly from US investors. Most investors prefer Mexico to Brazil, due to its geographical proximity to the US market, low-manufacturing costs, extensive global network of free trade agreements (FTAs), emerging middle class and growing domestic market.

However, according to the EIU, high input costs, an inefficient labor market, insecurity, corruption and a complex tax system (notwithstanding a 2014 fiscal reform) have affected the overall business environment.

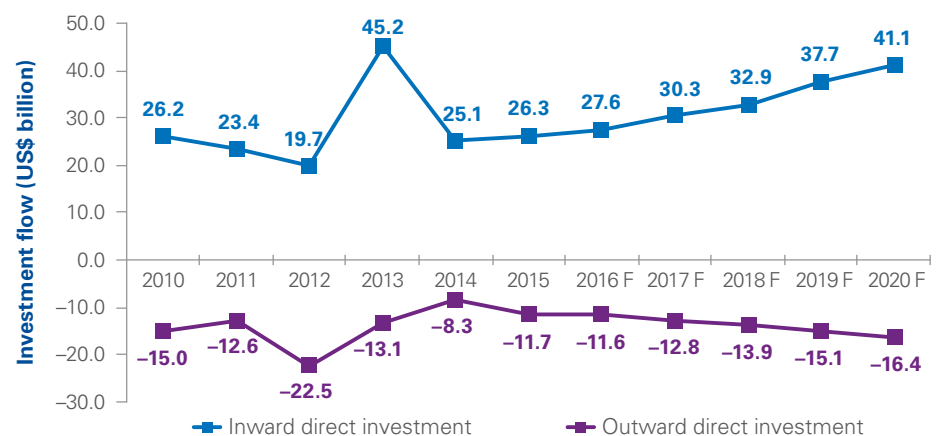
The government has made a good start on tackling some of these structural flaws through reforms. Nevertheless, there remain certain risks related to their effective implementation owing to institutional weaknesses and adverse

market conditions in the Energy sector, due to a fall in oil prices.²⁶

Despite global market conditions for minerals, mining investment in Mexico has maintained its vitality.

In 2014, US\$5 billion was invested in the Mexican Mining industry, which is expected to top US\$5.4 billion in 2015. Overall, the industry invested over US\$17 billion over the 2013–2015 period.²⁷

Figure 2: Trend for inward and outward direct investment in Mexico (2010–2020 F)



Source: Economist Intelligence Unit

²⁶ Mexico Country Profile, EIU, accessed on February 2, 2016

²⁷ Negocios ProMexico – May 2015, accessed on February 2, 2016

Key commodities – production and reserves

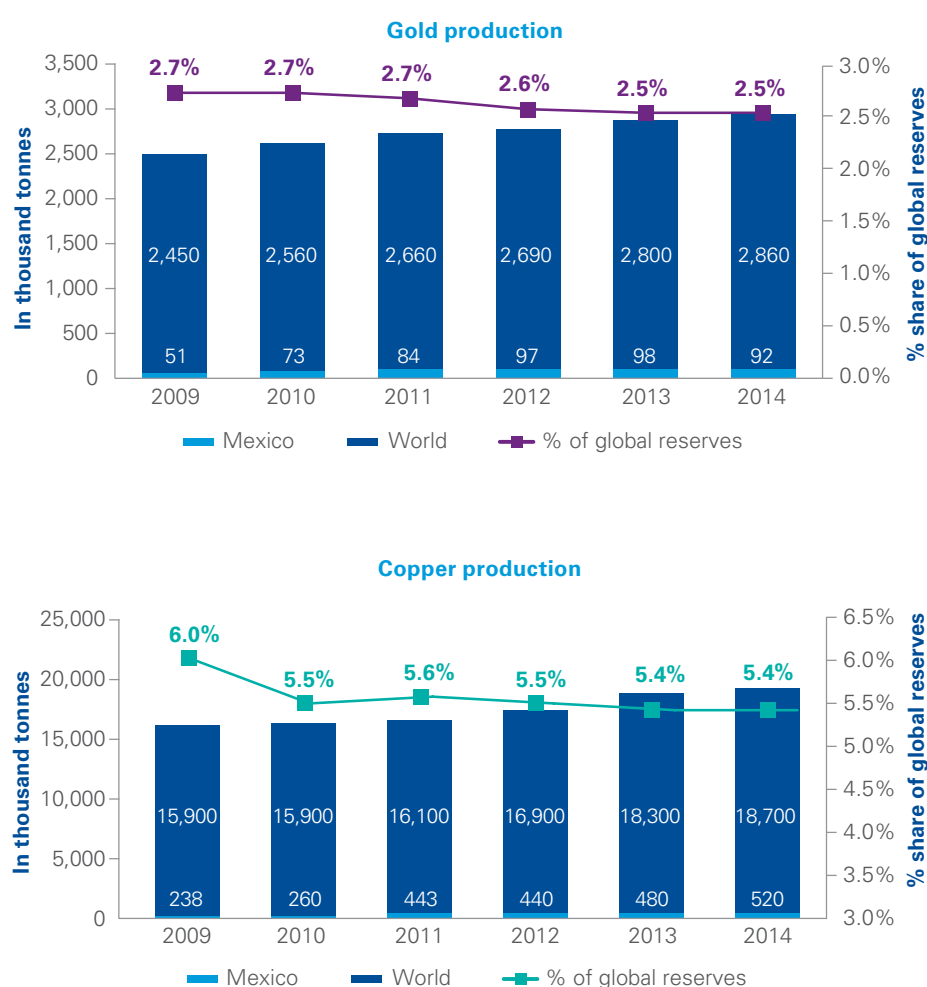
Production level of key commodities in Mexico²⁸

Mexico plays a key role in the global Mining industry, in terms of revenue, production and reserves. The country is amongst top 10-world producer of silver, fluorite, gold, bismuth, celestite, sodium sulphate, wollastonite, lead, molybdenum, diatomite, cadmium, graphite, baryte, salt, gypsum, manganese and zinc.

Over the past few years, the sector recorded a healthy growth, which is expected to continue in the future. Mexico is the world's largest producer of silver and a major producer of gold, copper and lead. According to SNL Financial, Mexico has increased its share of mining companies' global exploration dollars, from 4.6 percent in 2005 to 6.6 percent in 2014. Key facts of Mexico's production of commodities include:

- Mexico is the world's largest producer of silver with production of 4,700 tonnes in 2014 (7 percent of global production of 26,100 tonnes).
- Mexico is amongst the world's largest producer of gold with production of 92 tonnes in 2014 (2.5 percent of global production of 2,860 tonnes).
- Mexico is also a major producer of copper with production of 520,000 tonnes in 2014 (5.4 percent of global production of 18.7 million tonnes).

Figure 3: Production level and percent share of global reserves of key commodities in Mexico



²⁸ US Geological Survey – gold, copper, silver; accessed on February 3, 2016

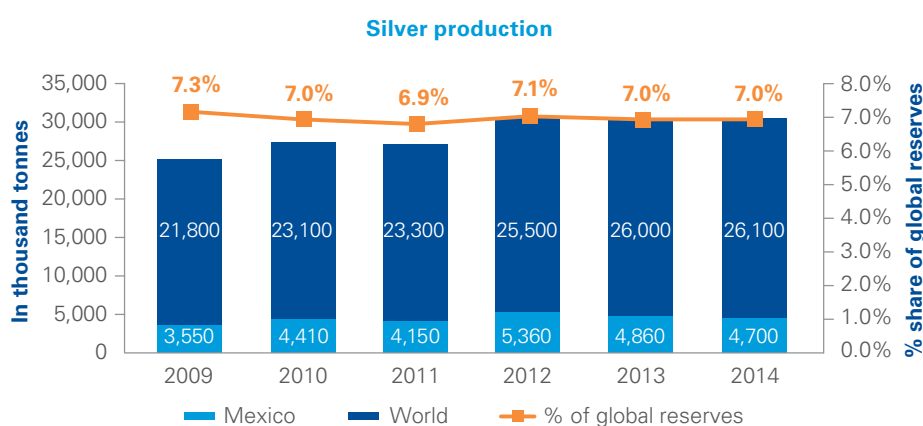
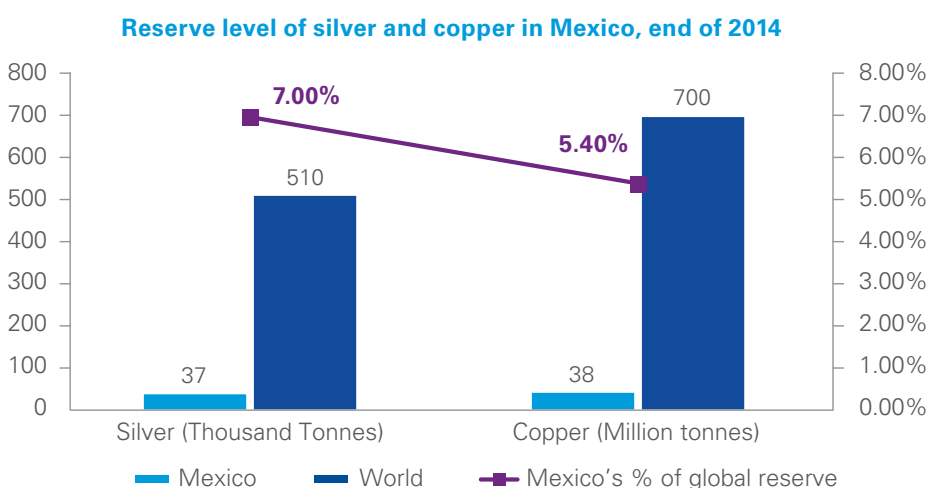


Figure 4: Reserve level of silver and copper in Mexico, end of 2010



Mexico's share in global reserves of key commodities²⁹

In 2014, Mexico was the largest producer of silver in the world. According to the US Geological Survey 2014, Mexico had an estimated reserve of approximately 37,000-tonnes of silver.

In addition, Mexico is a favored destination for investment in the Mining sector, primarily due to its geology, open investment regime, low labor costs and a developed Manufacturing sector, which are all expected to help maintain a positive business environment for the Mining sector in future.

²⁹ US Geological Survey – silver; accessed on February 3, 2016

Major mining companies in Mexico³⁰

Key domestic players

- Industrias Bago S.A. De C.V.
- Aluminio Laminado, S.A. De C.V.
- Grupo México S.A.B. de C.V.
- Estampados Y Electrosoldados, S.A. De C.V.
- Industrias Penoles S.A.B. DE CV
- Manufacturas Cifunsa, S.A. De C.V.
- Grupo Minero Mexico Internacional SA de CV
- IMSA Acero, S.A. de C.V.
- Electronica Pantera, S.A. De C.V.
- Met-Mex Penoles, S.A. De C.V.
- Altos Hornos de México, S.A.B. de C.V.
- Mexicana De Cobre, S.A. De C.V.
- Deacero, S.A. de C.V.
- Industrias CH, SAB de CV
- Grupo Simec S.A.B. de C.V.
- Fresnillo PLC
- Industrias Nucleares Anodrac, S.A. De C.V.
- IUSA, S.A. de C.V.
- Minera Capela S.A. de C.V.
- Minera Frisco, S.A.B. de C.V.
- Cia. Minera El Cacho De Oro, S.A. De C.V.
- Tubos Iusa, S.A. De C.V.
- Galvak, S.A. de C.V.
- Quimicos Industriales Peloles, S.A. De C.V.
- Plasver De Mexico, S.A De C.V.
- Minera Penmont S. de R.L. de C.V.
- ArcelorMittal las Truchas S.A. de C.V.

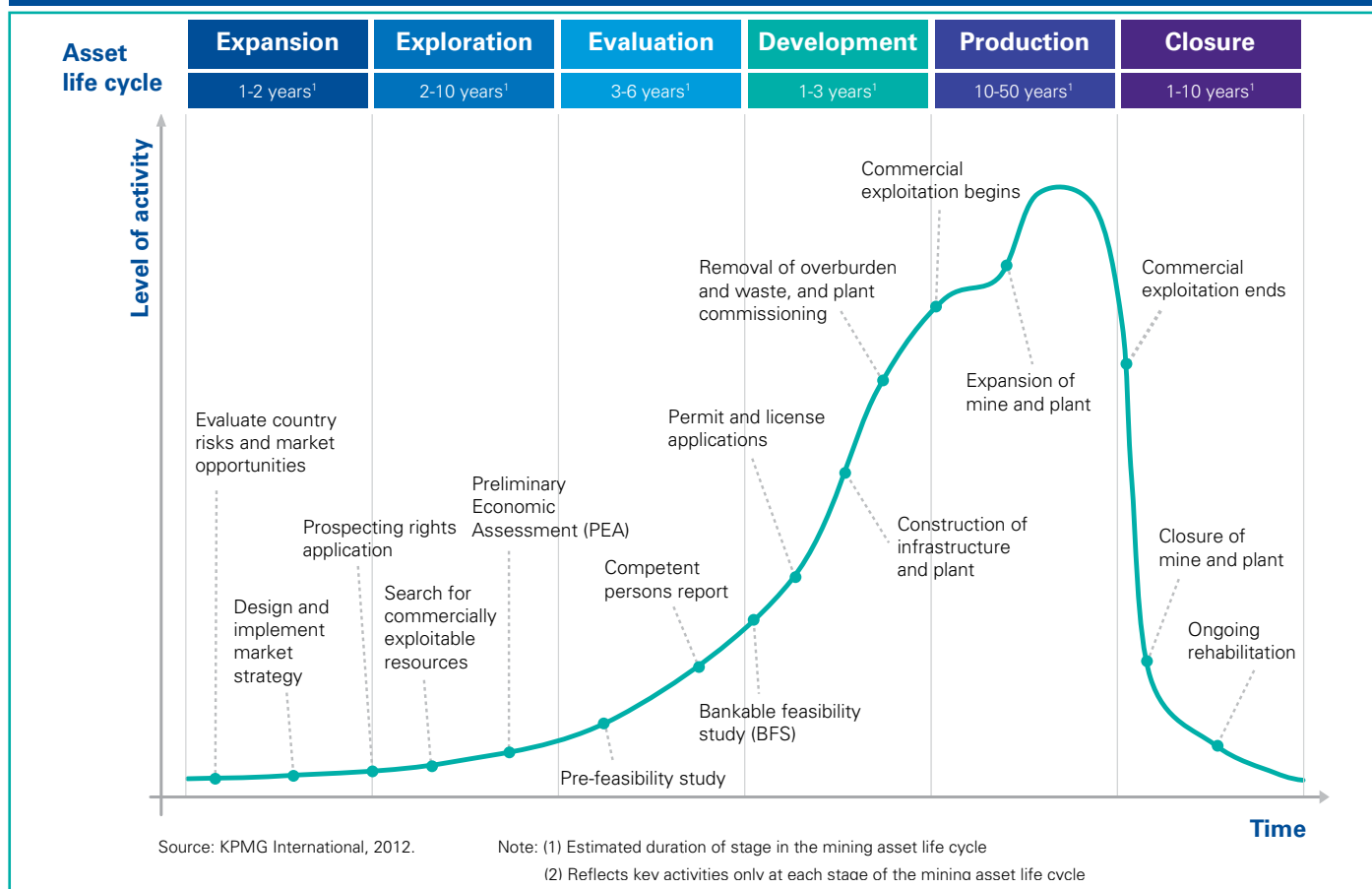
³⁰ Methodology used for identification of mining companies:

- For identifying top mining companies in Mexico, Capital IQ was accessed to generate the list of companies operating in Mexico in the following industry sectors: Aluminium; Diversified Metals and Mining; Gold; Precious Metals and Minerals and Steel and Silver
- The list was filtered to exclude domestic Mexican corporations with revenue less than US\$500 million (LTM February 2016)
- The list of foreign companies with operations in Mexico includes companies whose ultimate parent company are headquartered outside Mexico.

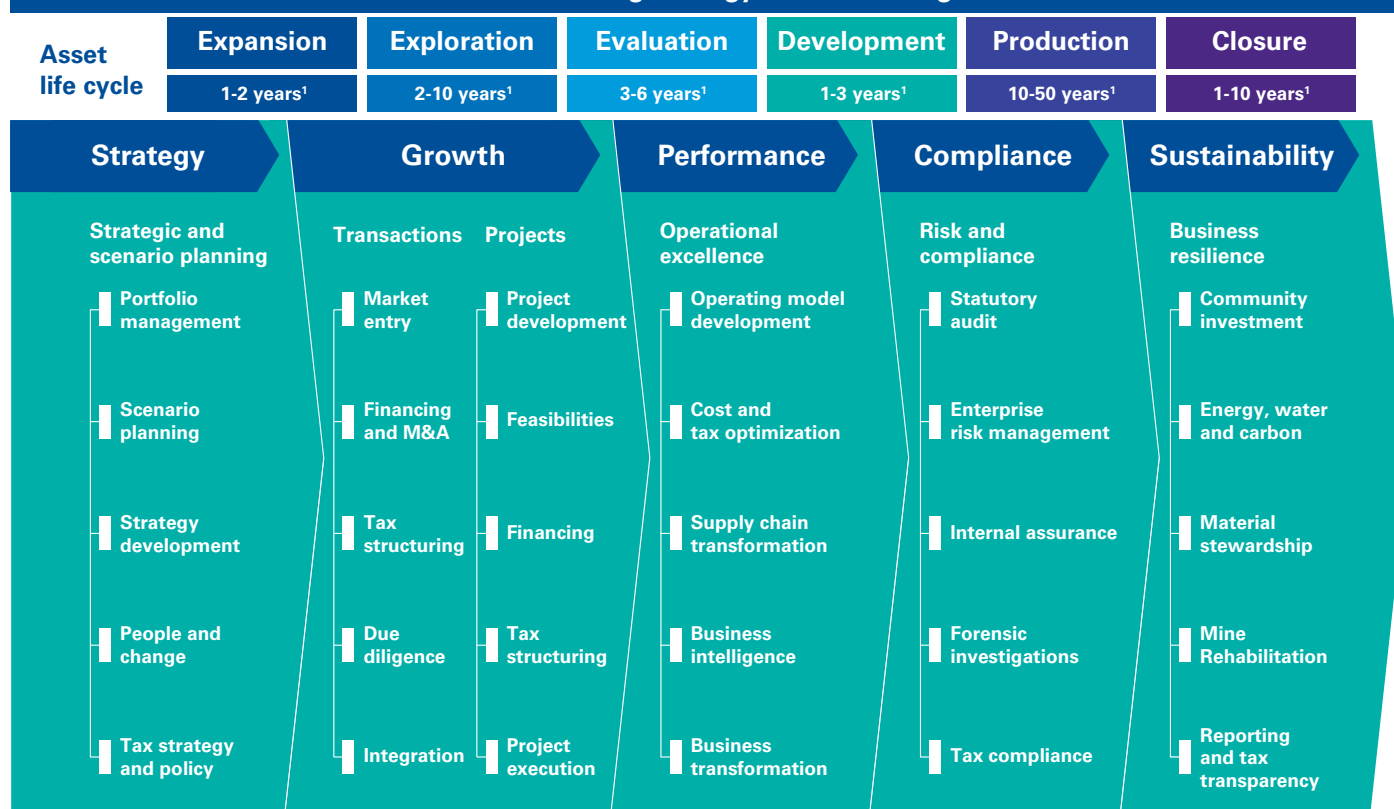
Foreign companies with operations in Mexico

- | | | |
|---|--------------------------------|-------------------------------------|
| — Agnico Eagle Mines Ltd. | — First Quantum Minerals Ltd. | — Nystar NV |
| — Alamos Gold Inc. | — Formation Metals Inc. | — Pan American Silver Corp. |
| — Aura Minerals Inc. | — Fortuna Silver Mines Inc. | — Primero Mining Corp. |
| — Argonaut Gold Inc. | — Goldcorp Inc. | — Quaterra Resources Inc. |
| — Aurcana Corporation | — Gold Resource Corporation | — Red Tiger Mining Inc. |
| — Brigus Gold Corp. | — GoGold Resources Inc. | — Scorpio Mining Corp. |
| — Capstone Mining Corp. | — Great Panther Silver Limited | — Silver Standard Resources Inc. |
| — Cardero Resource Corp. | — Hecla Mining Company | — SilverCrest Mines Inc. |
| — Castle Resources Inc. | — IMPACT Silver Corp. | — Southern Copper Corporation |
| — Coeur D'Alene Mines Corporation | — Kimber Resources Inc. | — Starcore International Mines Ltd. |
| — Sierra Metals Inc. (formerly Dia Bras) | — Lake Shore Gold Corp. | — Sutter Gold Mining Inc. |
| — Elgin Mining Inc. (formerly Phoenix Coal) | — McEwen Mining | — Teck Resources |
| — Endeavour Silver Corp. | — Mercator Minerals Ltd. | — Timmins Gold Corp. |
| — First Majestic Silver Corp. | — New Gold Inc. | — Torex Gold Resources Inc. |
| | — Newmont Mining Inc. | — Yamana Gold Inc. |

Mining asset life cycle



KPMG's mining strategy service offerings



Further insight from KPMG

An eye to the future – Adapting to change in a volatile mining industry



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

This release from KPMG's Global Mining Institute provide thoughtful insights into implementing change and the benefits of transformation through standardization, outsourcing and divesting non-performing or core

assets. After several years of unprecedented layoffs in the industry, talent and resource management will be critical to future success.

We therefore stress the need for international operators to have an effective mobility program that allows them to move resources from where they are to where they are needed, in a cost-effective and efficient manner, creating a strong, mobile and global workforce. Our analysis of talent management strategies highlights the benefits of having detailed, long-term output targets and matching resource needs accordingly.



Global Metals Outlook 2015

The past few years have been challenging for many metals organizations. Overcapacity and sagging iron ore prices have led to heightened pressure and intense competition. Not surprisingly, everyone is looking for new growth opportunities while – at the same

time – remaining keenly focused on reducing costs.

In this report, KPMG International provides a comprehensive overview of current trends, issues and opportunities in the global metals sector. It includes valuable benchmarks as well as forward-thinking advice and practical insights from KPMG partners, industry experts and metals leaders.



Insights into Mining

KPMG's mining practice is committed to the industry and periodically publish a series of insightful articles authored by leading KPMG Mining professionals and advisors. The articles are designed to inform and stimulate debate amongst those involved in the industry. Topics in recent articles

include Incremental Innovation, Project Risk and the Role of the Board, Exploring Linkages between Risk & Strategy, Key Questions on Risk Management and Net Asset Value (NAV) Multiples.



Mining M&A Quarterly Newsletters

This quarterly publication provides a current snapshot of the M&A market, providing a review of select key transactions while focusing on the rationale behind those deals as trends take shape. It highlights Canadian transactions, but set in the context of global M&A deals and trends.

KPMG global mining practice

KPMG member firms' mining clients operate in many countries and have a diverse range of needs. In each of these countries, we have local practices that understand the mining industry's challenges, regulatory requirements and preferred practices.

It is this local knowledge, supported and coordinated through KPMG's regional mining centers, which helps ensure our firms 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 14 dedicated mining centers 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 centers in Melbourne, Brisbane, Perth, Rio de Janeiro, Santiago, Toronto, Vancouver, Beijing, Moscow, Johannesburg, London, Denver, Singapore and Mumbai. These centers support mining companies around the world, helping them to anticipate and meet their business challenges.

For more information, visit kpmg.com/miningamericas

Mining centers



Contact us

KPMG in Mexico country contacts

Eduardo Salgado
Partner & National Industry Leader
Mining
T: 52 55 5246 8833
E: esalgado@kpmg.com.mx

Fernando Mancilla
Partner, Advisory
T: 52 55 5246 8748
E: fmancilla@kpmg.com.mx

Mario Hernandez
Partner, Tax
T: 52 65 6962 3616
E: mhernandez1@kpmg.com.mx

Mining Leadership contacts

Michiel Soeting
Global Chair, Energy & Natural Resources
T: +44 20 7311 1000
E: michiel.soeting@kpmg.co.uk

Lee Hodgkinson
Global Mining Leader – External Assurance
T: +1 416 777 3414
E: lhodgkinson@kpmg.ca

Jimmy Daboo
Global Head of Mining
T: +44 20 7311 8350
E: jimmy.daboo@kpmg.co.uk

Dane Ashe
Global Mining Leader – Internal Assurance
T: +27 828 284 812
E: dane.ashe@kpmg.co.za

Darice Henritze
Global Mining Leader – Tax
T: +1 303 382 7019
E: dhenritze@kpmg.com

Rohitesh Dhawan
Global Mining Leader – Sustainability
T: +27 827 196 114
E: rohitest.dhawan@kpmg.co.za

Hiran Bhadra
Global Mining Leader –
Operational Excellence
T: +1 214 840 2291
E: hbhadra@kpmg.com

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